```
=> fil reg
FILE 'REGISTRY' ENTERED AT 08:57:37 ON 17 NOV 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   15 NOV 2004  HIGHEST RN 781585-71-5
DICTIONARY FILE UPDATES:  15 NOV 2004  HIGHEST RN 781585-71-5

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> d sta que l22
L1                STR
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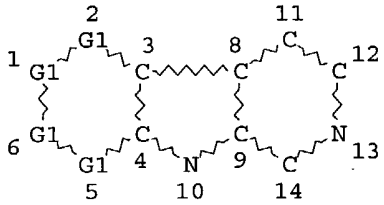


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VAR G1=C/N
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC   8
NUMBER OF NODES IS  13

STEREO ATTRIBUTES: NONE
L3         21421 SEA FILE=REGISTRY SSS FUL L1
L13               STR
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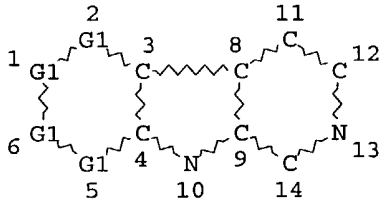


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CONNECT IS M1  RC AT  10
CONNECT IS M1  RC AT  12
CONNECT IS M1  RC AT  14
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
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GRAPH ATTRIBUTES:
RSPEC 8
NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE
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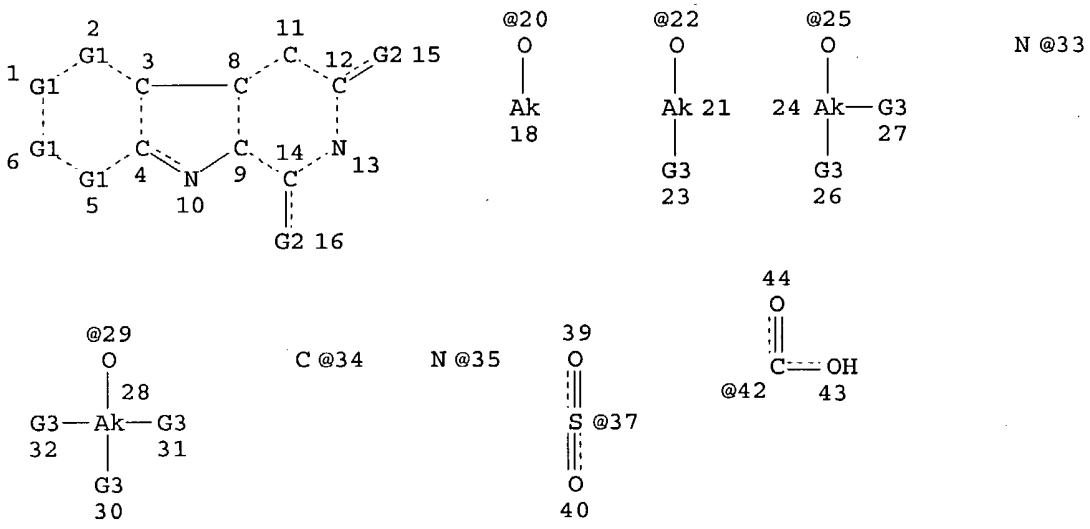
L16 15155 SEA FILE=REGISTRY ABB=ON PLU=ON L3 NOT L15
L17 STR



VAR G1=34/35
VAR G2=H/X/O/AK/20/22/25/29/33
VAR G3=CY/X/NO2/37/42/N/20/O/33
NODE ATTRIBUTES:
NSPEC IS RC AT 33
NSPEC IS R AT 34
NSPEC IS R AT 35
CONNECT IS M1 RC AT 10
CONNECT IS M1 RC AT 33
CONNECT IS M1 RC AT 34
CONNECT IS M1 RC AT 35
CONNECT IS M1 RC AT 37
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC 8
NUMBER OF NODES IS 38

STEREO ATTRIBUTES: NONE
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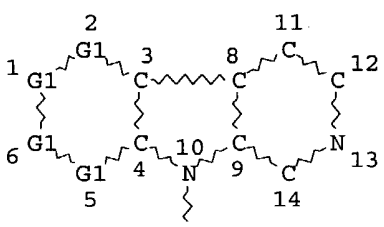
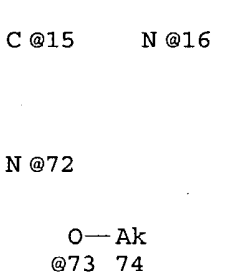
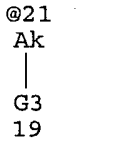
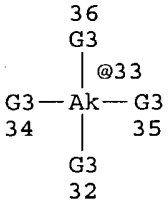
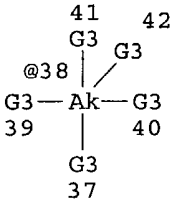
L20 STR

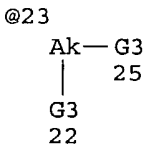


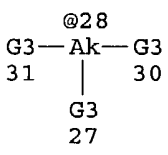


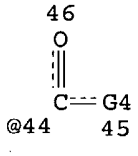


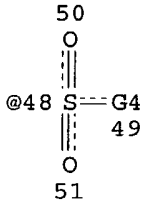


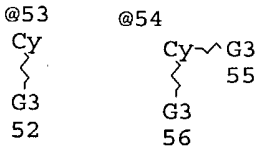


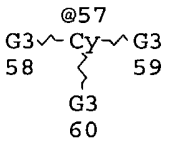


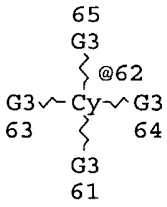


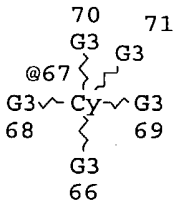










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VAR G1=15/16
VAR G2=H/AK/21/23/28/33/38/44/48
VAR G3=X/N/O
VAR G4=AK/21/23/28/33/38/CY/53/54/57/62/67/N/73/72
NODE ATTRIBUTES:
NSPEC   IS R      AT  15
NSPEC   IS R      AT  16
CONNECT IS M1  RC AT  11
CONNECT IS M1  RC AT  12
CONNECT IS M1  RC AT  14
CONNECT IS M1  RC AT  15
CONNECT IS M1  RC AT  16
CONNECT IS M1  RC AT  38
CONNECT IS M1  RC AT  67
CONNECT IS M1  RC AT  72
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC   8
NUMBER OF NODES IS  66

STEREO ATTRIBUTES: NONE
L22         530 SEA FILE=REGISTRY SUB=L19 CSS FUL L20

100.0% PROCESSED    603 ITERATIONS                    530 ANSWERS
SEARCH TIME: 00.00.01


=> d his

     (FILE 'HOME' ENTERED AT 07:24:30 ON 17 NOV 2004)
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                SET COST OFF

     FILE 'REGISTRY' ENTERED AT 07:24:39 ON 17 NOV 2004
L1                STR
L2             50 S L1
L3          21421 S L1 FUL
                  SAV TEMP L3 ZINNA627/A
L4                STR L1
L5              0 S L4 SAM SUB=L3
L6                STR L4
L7              0 S L6 SAM SUB=L3
L8              3 S L6 FUL SUB=L3
                  SAV L8 ZINNA627A/A
L9              2 S L8 AND NC5/ES
L10          5444 S L3 AND 1839.23.22/RID
L11               STR L1
L12            50 S L11 CSS SAM SUB=L3
L13               STR L11
L14            50 S L13 CSS SAM SUB=L3
L15          6266 S L13 CSS FUL SUB=L3
                  SAV L15 ZINNA627B/A
L16         15155 S L3 NOT L15
L17               STR L13
L18            39 S L17 CSS SAM SUB=L16
L19           603 S L17 CSS FUL SUB=L16
                  SAV L19 ZINNA627C/A
L20               STR L13
L21            36 S L20 CSS SAM SUB=L19
L22           530 S L20 CSS FUL SUB=L19
                  SAV L22 ZINNA627D/A
L23            73 S L19 NOT L22
L24           528 S L22 NOT L9

     FILE 'HCAOLD' ENTERED AT 08:06:12 ON 17 NOV 2004
L25             0 S L9
L26            54 S L24

     FILE 'HCAPLUS' ENTERED AT 08:06:55 ON 17 NOV 2004
L27             1 S L9
                  E AVENTI/PA,CS
L28          2233 S AVENTIS?/PA,CS
                  E RITZELER O/AU
L29            15 S E3,E4
                  E CASTRO A/AU
L30           672 S E3-E28
L31            26 S E65,E66
                  E GRENIER L/AU
L32            49 S E3,E4,E6
                  E SOUCY F/AU
L33            24 S E3,E5,E6
                  E HANCOCK W/AU
L34           208 S E3,E16,E21-E23
                  E MAZDIYASNI H/AU
L35            20 S E3,E4
                  E PALOMBELLA V/AU
L36            27 S E4-E6
                  E ADAMS J/AU
L37          1304 S E3-E62
                  E ADAMS JULIAN/AU
L38           186 S E3-E5
L39             1 S L27 AND L28-L38
L40          1106 S L24
L41             5 S L28-L38 AND L40
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L42           2 S (US20040110759 OR US20020099068 OR US6627637)/PN OR (US2003-6
L43           5 S L39,L41,L42

     FILE 'REGISTRY' ENTERED AT 08:14:09 ON 17 NOV 2004
L44           1 S 159606-08-3

     FILE 'HCAPLUS' ENTERED AT 08:17:14 ON 17 NOV 2004
L45         624 S L44
L46        1181 S (IKK OR IKK PROTEIN OR I KAPPA B OR I KAPPA B PROTEIN)()KINAS
L47         143 S I KAPPA B PROTEIN (L) KINASE
L48         137 S IKK# KINASE
L49         651 S KINASE (L) IKK# (L) PROTEIN
L50         106 S I KAPPA B ALPHA KINASE
L51           2 S CHUK KINASE
L52          12 S I VKAPPA B KINASE
L53         158 S IKK ALPHA KINASE
L54         212 S IKK BETA KINASE OR CONSERVED HELIX LOOP HELIX UBIQUIT? KINASE
L55        1508 S L45-L54
L56           5 S L43 AND L55
L57           5 S L40 AND L55
L58           5 S L56,L57
L59        1101 S L40 NOT L58
L60        1005 S L59 AND (PD<=20000315 OR PRD<=20000315 OR PRD<=20000315)
L61          73 S L24 (L) (THU OR PAC OR PKT OR DMA)/RL
L62         420 S L24 AND (PHARMACOL? OR PHARMACEUT?)/SC,SX
L63          13 S L24 AND PATHOL?/SC,SX
L64           1 S L24 AND IMMUN?/SC,SX
L65         381 S L60 AND L61-L64
                E ANTI-AIDS/CT
L66       13306 S E4,E5
                E E4+ALL
                E E15+ALL
L67       15458 S E9,E10,E8+NT
                E E24+ALL
L68       44186 S E6,E5+NT
                E E20+ALL
L69        3643 S E25
                E ANTI-ALZHEIMER/CT
L70        5077 S E5,E6
                E E5+ALL
L71       77045 S E7+OLD,NT,PFT,RT OR E8+OLD,NT,PFT,RT OR E9+OLD,NT,PFT,RT
                E E7+ALL
L72      134043 S E10 OR E26+OLD,NT OR E27+OLD,NT,PFT,RT OR E28+OLD,NT,PFT,RT O
L73        3824 S E34-E39
                E ASTHMA/CT
L74       15896 S E3-E5
                E E3+ALL
L75       15896 S E9
                E E12+ALL
L76       12267 S E5,E4+NT
L77         929 S E12
                E E11+ALL
                E E13+ALL
L78         947 S E3,E4
                E ARTHRITIS/CT
L79       14296 S E3-E24
                E E3+ALL
L80       27588 S E6+NT
L81       29129 S E5+NT
                E E22+ALL
L82        6206 S E5,E4
                E E7+ALL
                E E5+ALL
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L83        31139 S E4,E5,E3+NT
                 E E29+ALL
L84         6317 S E5,E4+NT
                 E E10+ALL
                 E E10+ALL
                 E E23+ALL
L85         1831 S E6,E5+NT
                 E HEART, DISEASE/CT
L86        74999 S E3-E83
                 E E3+ALL
L87        23857 S E8,E9
L88        76163 S E7+NT
L89       212727 S E92+OLD,NT
L90           35 S L60 AND L66-L89
L91           16 S L65 AND L90
L92           19 S L90 NOT L91
L93           35 S L90-L92
                 SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 08:35:46 ON 17 NOV 2004
L94           11 S E1-E11
L95           10 S L94 NOT C13H14N2

     FILE 'HCAPLUS' ENTERED AT 08:37:07 ON 17 NOV 2004
L96          965 S L95
L97           35 S L96 AND L93
L98          365 S L65 NOT L97
                 E TRANSCRIPTION FACTOR/CT
                 E TRANSCRIPTION FACTORS/CT
L99        94738 S E3
L100       95889 S E3+OLD
L101           0 S L98 AND L99,L100
L102          20 S L98 AND P/DT
                 SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 08:39:07 ON 17 NOV 2004
L103          67 S E1-E67
L104          66 S L103 NOT C21H19N3O4

     FILE 'HCAPLUS' ENTERED AT 08:41:57 ON 17 NOV 2004
L105         965 S L104
L106          20 S L105 AND L102
L107          55 S L97,L106
L108          55 S L107 AND L60
L109          55 S L108 AND L27-L43,L45-L93,L96-L102,L105-L108
L110          34 S L109 AND (COUGH? OR HEART, DISEASE OR ARTERIOSCLEROSIS OR HEA
L111           1 S L109 AND PHOSPHODIESTERASE
L112          35 S L110,L111
L113          20 S L109 NOT L112
L114           5 S L58 AND L27-L43,L45-L93,L96-L102,L105-L113

     FILE 'REGISTRY' ENTERED AT 08:57:37 ON 17 NOV 2004

=> d ide can tot l9

L9   ANSWER 1 OF 2  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   431889-77-9  REGISTRY
CN   3-Pyridinecarboxamide, 6-chloro-N-(6-chloro-7-methoxy-9H-pyrido[3,4-
     b]indol-8-yl)- (9CI)  (CA INDEX NAME)
FS   3D CONCORD
MF   C18 H12 Cl2 N4 O2
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER
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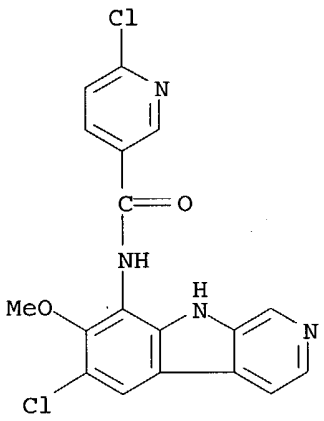
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

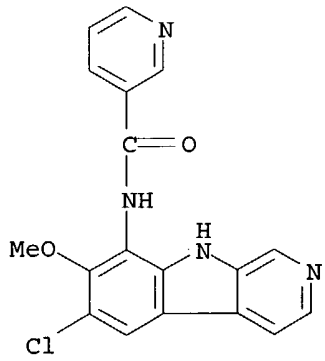


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 137:6093

L9 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2004 ACS on STN
RN 431886-97-4 REGISTRY
CN 3-Pyridinecarboxamide, N-(6-chloro-7-methoxy-9H-pyrido[3,4-b]indol-8-yl)-(9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C18 H13 Cl N4 O2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 137:6093

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 08:57:59 ON 17 NOV 2004

FILE COVERS 1907 - 17 Nov 2004 VOL 141 ISS 21
FILE LAST UPDATED: 16 Nov 2004 (20041116/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d l114 all fhitstr tot

L114 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:485903 HCAPLUS
DN 139:207080
ED Entered STN: 26 Jun 2003
TI Novel IKK inhibitors: β-carbolines
AU **Castro, Alfredo C.**; Dang, Luan C.; **Soucy, Francois**; **Grenier, Louis**; **Mazdiyasni, Hormoz**; Hottelet, Maria; Parent, Lana; Pien, Christine; **Palombella, Vito**; **Adams, Julian**
CS Millennium Pharmaceuticals Inc., Cambridge, MA, 02139, USA
SO Bioorganic & Medicinal Chemistry Letters (2003), 13(14), 2419-2422
CODEN: BMCLE8; ISSN: 0960-894X
PB Elsevier Science B.V.
DT Journal
LA English
CC 1-3 (**Pharmacology**)
OS CASREACT 139:207080
AB Inhibitors of **I.kappa.B kinase** (IKK) have long been sought as specific regulators of NF-κB. A screening effort of the endogenous IKK complex allowed us to identify 5-bromo-6-methoxy-β-carboline as a nonspecific IKK inhibitor. Optimization of this β-carboline natural product derivative resulted in a novel class of selective IKK inhibitors with IC50s in the nanomolar range. In addition, we show that one of these β-carboline analogs inhibits the phosphorylation of IκBα and subsequent activation of NF-κB in whole cells, as well as blocking TNF-α release in LPS-challenged mice.
ST carboline analog prepn structure activity IkB kinase inhibitor
IT **Transcription factors**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(IκB-α (NF-κB inhibitor α); preparation and structure-activity relationship of β-carbolines as novel IKK inhibitors)

IT **Transcription factors**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(NF-κB (nuclear factor of κ light chain gene enhancer in B-cells); preparation and structure-activity relationship of β-carbolines as novel IKK inhibitors)

IT Drug screening
Human
Structure-activity relationship
(preparation and structure-activity relationship of β-carbolines as novel IKK inhibitors)

IT Tumor necrosis factors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preparation and structure-activity relationship of β-carbolines as novel IKK inhibitors)

IT Natural products, pharmaceutical
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation and structure-activity relationship of β-carbolines as novel IKK inhibitors)

IT 141436-78-4, **Protein kinase** C 142008-29-5, **Protein kinase** A 366806-33-9, **Protein kinase** CKII
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preparation and structure-activity relationship of β-carbolines as novel **IKK** inhibitors)

IT **30684-46-9P 361202-24-6P 361202-40-6P 431886-04-3P**
RL: **PAC (Pharmacological activity)**; RCT (Reactant); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation and structure-activity relationship of β-carbolines as novel IKK inhibitors)

IT **108061-46-7**
RL: **PAC (Pharmacological activity)**; RCT (Reactant); **THU (Therapeutic use)**; BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(preparation and structure-activity relationship of β-carbolines as novel IKK inhibitors)

IT **30684-42-5P 59444-69-8P 86349-41-9P 162272-97-1P 361202-16-6P**, 9H-Pyrido[3,4-b]indole-6-carbonitrile **361202-25-7P 361202-39-3P 431884-23-0P 431888-24-3P**
RL: **PAC (Pharmacological activity)**; SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and structure-activity relationship of β-carbolines as novel IKK inhibitors)

IT 244-63-3, 9H-Pyrido[3,4-b]indole **361202-21-3 361202-26-8 361202-37-1 361202-43-9 361202-45-1 361202-47-3 361202-51-9 361202-61-1 361202-63-3 361202-65-5 431882-80-3 431887-65-9 431889-34-8 431898-65-6 590398-78-0 590398-81-5 590398-88-2 590398-93-9 590398-96-2 590398-98-4**
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(preparation and structure-activity relationship of β-carbolines as novel IKK inhibitors)

IT 55-22-1, 4-Pyridinecarboxylic acid, reactions 59-67-6, 3-Pyridinecarboxylic acid, reactions 64-19-7, Acetic acid, reactions 65-85-0, Benzoic acid, reactions 75-75-2, Methanesulfonic acid 98-11-3, Benzenesulfonic acid, reactions 98-98-6, 2-Pyridinecarboxylic acid 100-09-4, Benzoic acid, 4-methoxy- 100-49-2, Cyclohexanemethanol

368-90-1, Hydrazine, 4-(trifluoromethyl)phenyl- 576-16-9, 1H-Indole-3-ethanamine, 5-fluoro- 579-75-9, Benzoic acid, 2-methoxy- 586-38-9, Benzoic acid, 3-methoxy- 591-81-1, Butanoic acid, 4-hydroxy- 608-07-1, 1H-Indole-3-ethanamine, 5-methoxy- 2516-33-8, Cyclopropanemethanol 3610-36-4 6414-57-9, Carbamic acid, methyl- 7456-87-3, Carbonic acid, monomethyl ester 13115-43-0, 2-Pyridineacetic acid 17672-27-4, Benzonitrile, 4-hydrazino- 41907-06-6, 2,3-Piperidinedione 50881-96-4, 4-Morpholinecarboxylic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation and structure-activity relationship of β-carbolines as novel IKK inhibitors)

IT **6253-19-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and structure-activity relationship of β-carbolines as novel IKK inhibitors)

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE
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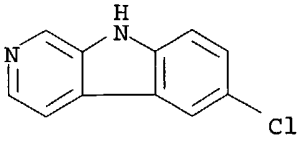
IT **30684-46-9P**
RL: **PAC (Pharmacological activity); THU (Therapeutic use); THU (Therapeutic use); THU (Therapeutic use)** ; BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation and structure-activity relationship of β-carbolines as novel IKK inhibitors)

RN 30684-46-9 HCAPLUS
CN 9H-Pyrido[3,4-b]indole, 6-chloro- (8CI, 9CI) (CA INDEX NAME)



L114 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:376638 HCAPLUS
DN 138:379205
ED Entered STN: 16 May 2003
TI Use of inhibitors of **I.kappa.B kinase** for the treatment of cancer
IN **Adams, Julian**
PA Millennium Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 110 pp.
CODEN: PIXXD2

DT Patent
LA English
IC ICM A61K031-4439
CC 1-6 (**Pharmacology**)
Section cross-reference(s): 28
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003039545	A2	20030515	WO 2002-US35645	20021106
	WO 2003039545	A3	20031030		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

	EP 1443927	A2	20040811	EP 2002-789471	20021106

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

PRAI	US 2001-344911P	P	20011107
	WO 2002-US35645	W	20021106

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2003039545	ICM	A61K031-4439

OS MARPAT 138:379205
AB The invention discloses the use of inhibitors of **I.kappa .B kinase** to inhibit the growth of a cancer cell and to treat cancer, including multiple myeloma. Preparation and biol. testing of N-(6-chloro-9H-β-carbolin-8-yl)nicotinamide is described.
ST IkappaB kinase inhibitor cancer treatment; multiple myeloma treatment IkappaB kinase inhibitor; carbolinyl nicotinamide deriv prepn IkappaB kinase inhibitor antitumor
IT Interphase (cell cycle)
(G1-phase, G1 growth arrest; **Iκ B kinase** inhibitors for treatment of cancer)
IT Cell adhesion molecules
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(ICAM-1 (intercellular adhesion mol. 1); **Iκ B kinase** inhibitors for treatment of cancer)
IT Adhesion, biological
Antitumor agents
Apoptosis
Drug interactions
Human
Multiple myeloma
Neoplasm
(**Iκ B kinase** inhibitors for treatment of cancer)
IT Interleukin 6
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**Iκ B kinase** inhibitors for treatment of cancer)
IT **Transcription factors**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(NF-κB (nuclear factor of κ light chain gene enhancer in B-cells), activation inhibition; **Iκ B kinase** inhibitors for treatment of cancer)
IT Tumor necrosis factors

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(TNF-α; **Iκ B kinase** inhibitors for treatment of cancer)
IT Phosphorylation, biological
(protein; **Iκ B kinase** inhibitors for treatment of cancer)
IT **159606-08-3**, **Iκ B Kinase** 362516-16-3, **IKKα kinase**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**Iκ B kinase** inhibitors for treatment of cancer)
IT **431898-65-6P**
RL: **DMA (Drug mechanism of action)**; **PAC (Pharmacological activity)**; SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(**Iκ B kinase** inhibitors for treatment of cancer)
IT 50-02-2, Dexamethasone 50-35-1, Thalidomide 19171-19-8, IMiD3 179324-69-7, PS-341
RL: PAC (Pharmacological activity); BIOL (Biological study)
(**Iκ B kinase** inhibitors for treatment of cancer)
IT 244-63-3, Norharman 20260-53-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(**Iκ B kinase** inhibitors for treatment of cancer)
IT **30684-46-9P 361202-24-6P 361202-25-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(**Iκ B kinase** inhibitors for treatment of cancer)
IT **159606-08-3**, **Iκ B Kinase**
RL: **DMA (Drug mechanism of action)**; **PAC (Pharmacological activity)**; **THU (Therapeutic use)**
(**Iκ B kinase** inhibitors for treatment of cancer)
RN 159606-08-3 HCAPLUS
CN Kinase (phosphorylating), IκB protein (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L114 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:405760 HCAPLUS
DN 137:6093
ED Entered STN: 30 May 2002
TI Preparation of substituted beta-carbolines as potential therapeutics in diseases associated with increased **I.kappa.B kinase** activity
IN **Ritzeler, Olaf; Castro, Alfredo; Grenier, Louis; Soucy, Francois; Hancock, Wayne W.; Mazdiyasni, Hormoz; Palombella, Vito; Adams, Julian**
PA **Aventis Pharma Deutschland GmbH, Germany**
SO Eur. Pat. Appl., 56 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM C07D471-04
ICS A61K031-44; A61P029-00
CC 27-16 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): **1**, 31, **63**

FAN.CNT 2

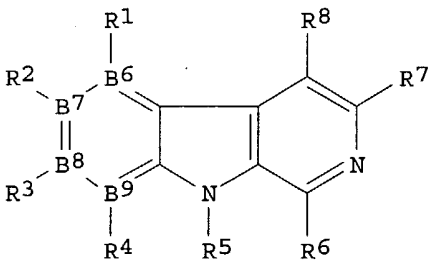
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1209158	A1	20020529	EP 2000-125169	20001118 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	CA 2402549	AA	20010920	CA 2001-2402549	20010228 <--
	WO 2001068648	A1	20010920	WO 2001-EP2237	20010228 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	BR 2001009161	A	20021126	BR 2001-9161	20010228 <--
	EP 1268477	A1	20030102	EP 2001-909799	20010228 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2003527394	T2	20030916	JP 2001-567739	20010228 <--
	EE 200200523	A	20040415	EE 2002-523	20010228 <--
	NZ 521386	A	20040625	NZ 2001-521386	20010228 <--
	US 2002099068	A1	20020725	US 2001-812785	20010315 <--
	US 6627637	B2	20030930		
	NO 2002004338	A	20021105	NO 2002-4338	20020911 <--
	US 2004110759	A1	20040610	US 2003-627978	20030728 <--
PRAI	EP 2000-105514	A	20000315 <--		
	EP 2000-125169	A	20001118 <--		
	WO 2001-EP2237	W	20010228		
	US 2001-812785	A1	20010315 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1209158	ICM	C07D471-04
	ICS	A61K031-44; A61P029-00
EP 1209158	ECLA	A61K031/437; A61K031/4745; A61K031/498; A61K031/503; A61K031/519 <--

OS MARPAT 137:6093

GI



I

AB Carbolines I (B6, B7, B8, B9 = C, N, no more than 2 N's at the same time; R1-R4, R8 = H, halogen, OH, CN, sulfo, NO2, alkoxy, substituted amino, substituted amide, CO2H, substituted hydroxy, ketone, ester, aryl, O-aryl, substituted aryl, O-substituted aryl, alkyl, substituted alkyl, CF3, CF2CF3; R5 = H, alkyl, alkyl radical, ketone, sulfo; R6, R7 = H, halogen, OH, Me, O-alkyl, O-substituted alkyl, substituted amino) were prepared as potential therapeutics for diseases associated with increased activity of **I.kappa.B kinase.** Thus, norharmane

was treated with bromine to give 7-bromo-β-carboline (II). II had an IC50 value of 0.4 μM in a **I.kappa.B kinase** in an assay using **I.kappa.B kinase** complex prepared from HeLa S3 cell exts.

ST carboline beta substituted prepn; IkB kinase inhibitor beta carboline prepn; benzimidazole substituted IkB kinase inhibitor prepn

IT **Transcription factors**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(NF-κB (nuclear factor of κ light chain gene enhancer in B-cells); preparation of substituted beta-carbolines as potential therapeutics in diseases associated with increased **I κ B kinase** activity)

IT **Anti-AIDS agents**
Anti-Alzheimer's agents
Antiarthritics
Antiasthmatics
Antitumor agents
Arthritis
Heart, disease
(preparation of substituted beta-carbolines as potential therapeutics in diseases associated with increased **Iκ B kinase** activity)

IT **159606-08-3, Iκ B Kinase**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preparation of substituted beta-carbolines as potential therapeutics in diseases associated with increased **Iκ B kinase** activity)

IT **487-03-6P 6253-19-6P 30684-42-5P 30684-46-9P 59444-69-8P 86349-42-0P 361202-24-6P 361202-25-7P** 361202-29-1P **361202-38-2P 361202-39-3P 361202-44-0P**
RL: **PAC (Pharmacological activity)**; RCT (Reactant); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of substituted beta-carbolines as potential therapeutics in diseases associated with increased **Iκ B kinase** activity)

IT **10593-56-3P 18813-71-3P 30684-43-6P 58982-28-8P**, 9H-Pyrido[3,4-b]indol-6-ol **59444-70-1P 86349-41-9P 113960-66-0P 162272-97-1P 241809-29-0P 257938-78-6P 257938-81-1P 361202-14-4P 361202-15-5P 361202-16-6P**, 9H-Pyrido[3,4-b]indole-6-carbonitrile **361202-17-7P 361202-19-9P 361202-20-2P 361202-21-3P 361202-22-4P 361202-23-5P 361202-27-9P 361202-28-0P 361202-30-4P** 361202-31-5P 361202-32-6P **361202-33-7P 361202-34-8P 361202-36-0P 361202-40-6P 361202-42-8P 361202-46-2P 361202-48-4P 361202-50-8P 361202-52-0P 361202-54-2P 361202-56-4P 361202-58-6P 361202-60-0P 361202-62-2P 361202-64-4P 361202-66-6P 361202-68-8P 431882-81-4P 431882-98-3P 431883-85-1P 431884-23-0P 431885-15-3P 431885-78-8P 431886-04-3P 431886-54-3P 431886-95-2P 431886-96-3P 431886-97-4P** 431886-99-6P **431887-00-2P 431887-01-3P 431887-04-6P 431887-05-7P 431887-06-8P 431887-07-9P 431887-08-0P 431887-09-1P 431887-46-6P 431887-47-7P 431887-51-3P 431887-55-7P 431887-57-9P 431887-58-0P 431887-59-1P 431887-60-4P 431887-62-6P 431887-65-9P 431887-70-6P**

431887-72-8P 431887-77-3P 431887-81-9P
431887-86-4P 431887-90-0P 431888-20-9P
431888-23-2P 431888-24-3P 431888-64-1P
431889-13-3P 431889-15-5P 431889-16-6P
431889-19-9P 431889-21-3P 431889-22-4P
431889-28-0P 431889-30-4P 431889-34-8P
431889-36-0P 431889-43-9P 431889-47-3P
431889-55-3P 431889-60-0P 431889-62-2P
431889-63-3P 431889-74-6P 431889-76-8P
431889-77-9P 431890-01-6P 431890-04-9P
431898-66-7P 431898-69-0P 431898-70-3P
431898-71-4P
RL: **PAC (Pharmacological activity)**; SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of substituted beta-carbolines as potential therapeutics in diseases associated with increased **Iκ B kinase** activity)

IT 79-03-8, Propionyl chloride 98-88-4, Benzoyl chloride 100-07-2, p-Anisoyl chloride 100-39-0, Benzyl bromide 105-36-2, Ethyl bromoacetate 108-12-3, Isovaleryl chloride 244-63-3, Norharmane 368-90-1, 4-Trifluoromethyl-phenylhydrazine **442-51-3**, Harmine 575-85-9, 6-Fluorotryptamine 608-07-1, 5-Methoxytryptamine 1711-05-3, m-Anisoyl chloride 1885-14-9, Phenyl chloroformate 2711-58-2, 5-Fluorotryptamine hydrochloride 3610-36-4, 6-Methoxytryptamine 5292-43-3, tert-Butyl bromoacetate 15159-40-7, 4-Morpholinecarbonyl chloride 19365-08-3 20260-53-1, Nicotinoyl chloride hydrochloride 32464-55-4 38870-89-2, Methoxyacetyl chloride 58757-38-3, 6-Chloronicotinoyl chloride 76903-88-3, 3,4-Difluorobenzoyl chloride 118427-29-5, 4-Isopropylphenylhydrazine hydrochloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of substituted beta-carbolines as potential therapeutics in diseases associated with increased **Iκ B kinase** activity)

IT 222733-83-7P 431897-22-2P **431897-27-7P 431897-30-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of substituted beta-carbolines as potential therapeutics in diseases associated with increased **Iκ B kinase** activity)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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(12) Univ Illinois; EP 0133000 A 1985 HCAPLUS

IT **159606-08-3, Iκ B Kinase**
RL: **PAC (Pharmacological activity)**; BIOL (Biological study); **THU (Therapeutic use)**; **THU (Therapeutic use)**
(preparation of substituted beta-carbolines as potential therapeutics in diseases associated with increased **Iκ B kinase** activity)

RN 159606-08-3 HCAPLUS
CN Kinase (phosphorylating), IκB protein (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L114 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:371242 HCAPLUS
DN 137:304403
ED Entered STN: 19 May 2002
TI NF-κB as a therapeutic target in multiple myeloma
AU Hideshima, Teru; Chauhan, Dharminder; Richardson, Paul; Mitsiades, Constantine; Mitsiades, Nicholas; Hayashi, Toshiaki; Munshi, Nikhil; Dang, Lenny; **Castro, Alfredo**; **Palombella, Vito**; **Adams, Julian**; Anderson, Kenneth C.
CS Jerome Lipper Multiple Myeloma Center, Dana-Farber Cancer Institute and Harvard Medical School, Boston, MA, 02115, USA
SO Journal of Biological Chemistry (2002), 277(19), 16639-16647
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
CC 1-6 (**Pharmacology**)
AB We have shown that thalidomide (Thal) and its immunomodulatory derivs. (IMiDs), proteasome inhibitor PS-341, and As2O3 act directly on multiple myeloma (MM) cells and in the bone marrow (BM) milieu to overcome drug resistance. Although Thal/IMiDs, PS-341, and As2O3 inhibit nuclear factor (NF)-κB activation, they also have multiple and varied other actions. In this study, we therefore specifically address the role of NF-κB blockade in mediating anti-MM activity. To characterize the effect of specific NF-κB blockade on MM cell growth and survival in vitro, we used an **I.kappa.B kinase** (**IKK**) inhibitor (PS-1145). Our studies demonstrate that PS-1145 and PS-341 block TNFα-induced NF-κB activation in a dose- and time-dependent fashion in MM cells through inhibition of IκBα phosphorylation and degradation of IκBα, resp. Dexamethasone (Dex), which up-regulates IκBα **protein**, enhances blockade of NF-κB activation by PS-1145. Moreover, PS-1145 blocks the protective effect of IL-6 against Dex-induced apoptosis. TNFα-induced intracellular adhesion mol. (ICAM)-1 expression on both RPMI8226 and MM.1S cells is also inhibited by PS-1145. Moreover, PS-1145 inhibits both IL-6 secretion from BMSCs triggered by MM cell adhesion and proliferation of MM cells adherent to BMSCs. However, in contrast to PS-341, PS-1145 only partially (20-50%) inhibits MM cell proliferation, suggesting that NF-κB blockade cannot account for all of the anti-MM activity of PS-341. Importantly, however, TNFα induces MM cell toxicity in the presence of PS-1145. These studies demonstrate that specific targeting of NF-κB can overcome the growth and survival advantage conferred both by tumor cell binding to BMSCs and cytokine secretion in the BM milieu. Furthermore, they provide the framework for clin. evaluation of novel MM therapies based upon targeting NF-κB.
ST antitumor PS1145 target human myeloma inhibitor cytokine signaling
IT Cell adhesion molecules
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(ICAM-1 (intercellular adhesion mol. 1); NF-κB as a therapeutic target in multiple myeloma)
IT **Transcription factors**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(NF-κB (nuclear factor of κ light chain gene enhancer in B-cells); NF-κB as a therapeutic target in multiple myeloma)
IT Antitumor agents
Apoptosis
Cell cycle
Drug delivery systems
Human
Signal transduction, biological

(NF-κB as a therapeutic target in multiple myeloma)
IT Interleukin 6
Tumor necrosis factors
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(NF-κB as a therapeutic target in multiple myeloma)
IT **Transcription factors**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(STAT3 (signal transducer and activator of transcription 3); NF-κB as a therapeutic target in multiple myeloma)
IT Drug resistance
(antitumor; NF-κB as a therapeutic target in multiple myeloma)
IT **Multiple myeloma**
(inhibitor; NF-κB as a therapeutic target in multiple myeloma)
IT Antitumor agents
(resistance to; NF-κB as a therapeutic target in multiple myeloma)
IT 137632-07-6, p44 Mitogen-activated protein kinase 137632-08-7, p42 Mitogen-activated protein kinase 362516-16-3, **Iκ B Kinase** α
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(NF-κB as a therapeutic target in multiple myeloma)
IT 179324-69-7, PS-341 **431898-65-6**, PS 1145
RL: **DMA (Drug mechanism of action)**; **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(NF-κB as a therapeutic target in multiple myeloma)
IT 50-02-2, Dexamethasone
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(NF-κB as a therapeutic target in multiple myeloma)
RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anphan, N; Science 1995, V270, P286
(2) Baldwin, A; Ann Rev Immunol 1996, V14, P649 HCAPLUS
(3) Baldwin, A; J Clin Invest 2001, V107, P241 HCAPLUS
(4) Baldwin, A; Mol Cell Biol 1991, V11, P4943 HCAPLUS
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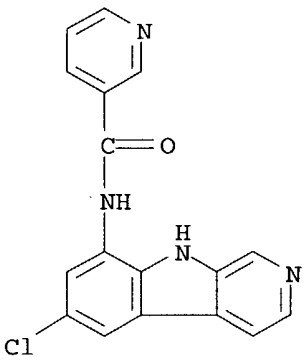
IT **431898-65-6**, PS 1145
RL: **DMA (Drug mechanism of action)**; **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(NF-κB as a therapeutic target in multiple myeloma)

RN 431898-65-6 HCAPLUS

CN 3-Pyridinecarboxamide, N-(6-chloro-9H-pyrido[3,4-b]indol-8-yl)- (9CI) (CA INDEX NAME)



L114 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:691768 HCAPLUS

DN 135:242149

ED Entered STN: 21 Sep 2001

TI Preparation of substituted β-carbolines as **I.kappa .B kinase** inhibitors

IN **Ritzeler, Olaf; Castro, Alfredo; Grenier, Louis; Soucy, Francois**

PA **Aventis Pharma Deutschland G.m.b.H., Germany**

SO Eur. Pat. Appl., 47 pp.
CODEN: EPXXDW

DT Patent

LA English

IC ICM C07D471-04
ICS A61K031-44

ICI C07D471-04, C07D209-00, C07D211-00

CC 27-16 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): **1**

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    EP 2000-125169      A     20001118  <--
    WO 2001-EP2237      W     20010228
    US 2001-812785      A1    20010315  <--
CLASS
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                  ICS    A61K031-44
                  ICI    C07D471-04, C07D209-00, C07D211-00
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OS   MARPAT 135:242149
GI
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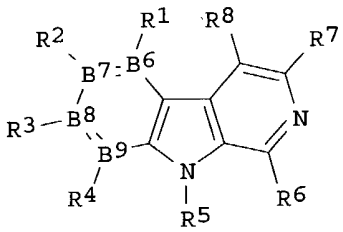

I

AB The title compds. [I; B6-B9 = C, N (no more than 2 N atoms at the same time); R1-R4, R8 = H, halo, OH, etc.; R5 = H, (un)substituted alkyl, etc.; R6, R7 = H, halo, OH, etc.], useful for prophylaxis and therapy of disorders in which increased activity of NFκB is involved such as asthma, osteoarthritis, rheumatoid arthritis, Alzheimer's disease, carcinomatous disorders and cardiac infarct, were prepared Thus, treating norharmane with Br2 in THF afforded 7-bromo-β-carboline which showed IC50 of 0.4 μM against **I.kappa.B kinase.**

ST carboline beta prepn IkB kinase inhibitor; transcription factor NFkB carboline beta prepn; antiasthmatic carboline beta prepn; antiarthritic

carboline beta prepn; Alzheimer disease carboline beta prepn; antitumor carboline beta prepn; heart disease infarction carboline beta prepn

IT **Transcription factors**
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)
(NF-κB (nuclear factor κB); preparation of substituted β-carbolines as Iκ **B kinase** inhibitors)

IT **Heart, disease**
(**infarction**; preparation of substituted β-carbolines as Iκ **B kinase** inhibitors)

IT **Anti-Alzheimer's agents**
Antiarthritics
Antiasthmatics
Antitumor agents
(preparation of substituted β-carbolines as Iκ **B kinase** inhibitors)

IT **487-03-6P 30684-42-5P 30684-46-9P**
30684-48-1P, 8-Methoxy-β-carboline **59444-69-8P**
86349-42-0P 361202-16-6P, 9H-Pyrido[3,4-b]indole-6-carbonitrile **361202-24-6P 361202-25-7P** 361202-29-1P
361202-31-5P **361202-38-2P 361202-39-3P**
361202-42-8P 361202-44-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of substituted β-carbolines as Iκ **B kinase** inhibitors)

IT **10593-56-3P 18813-71-3P 30684-43-6P**
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86349-41-9P 113960-66-0P 162272-97-1P
241809-29-0P 257938-78-6P 257938-81-1P
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361202-60-0P 361202-62-2P 361202-64-4P
361202-66-6P 361202-68-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of substituted β-carbolines as Iκ **B kinase** inhibitors)

IT **159606-08-3**
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)
(preparation of substituted β-carbolines as Iκ **B kinase** inhibitors)

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32464-55-4 38870-89-2, Methoxyacetyl chloride 118427-29-5, 4-Isopropylphenylhydrazine hydrochloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of substituted β-carbolines as **Iκ B kinase** inhibitors)

IT 111492-80-9P 361202-69-9P 361202-70-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of substituted β-carbolines as **Iκ B kinase** inhibitors)

RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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IT **487-03-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); **THU (Therapeutic use)**; **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of substituted β-carbolines as **Iκ B kinase** inhibitors)

RN 487-03-6 HCAPLUS
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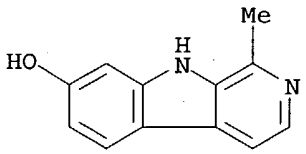

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DICTIONARY FILE UPDATES: 15 NOV 2004 HIGHEST RN 781585-71-5

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

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IN Benzamide, N-(6-chloro-9H-pyrido[3,4-b]indol-8-yl)-3,4-difluoro- (9CI)
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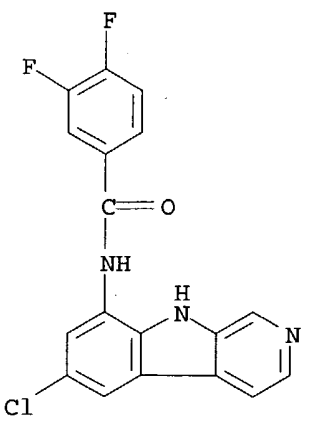

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IN 9H-Pyrido[3,4-b]indole-9-ethanol, 6-chloro- (9CI)
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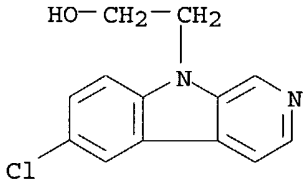

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L116 135 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
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(9CI)
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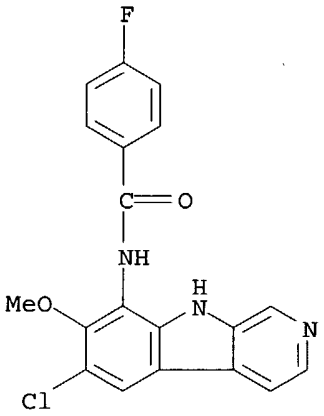

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L116 135 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Butanamide, N-(6-chloro-9H-pyrido[3,4-b]indol-8-yl)-3-methyl-,
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MF C16 H16 Cl N3 O . C2 H F3 O2

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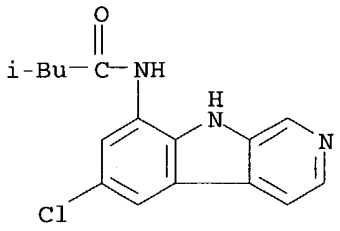

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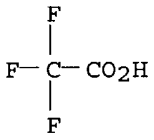

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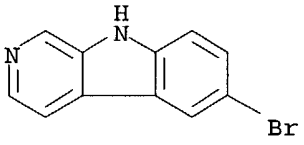

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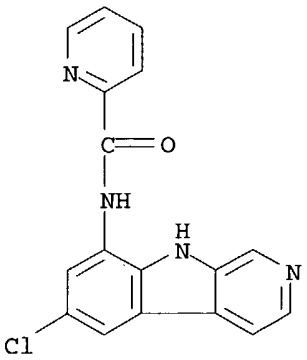

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IN 9H-Pyrido[3,4-b]indole, 6,8-dichloro-7-methoxy-, mono(trifluoroacetate) (9CI)
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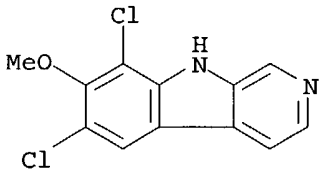
CM 1



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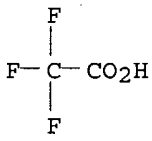

L116 135 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
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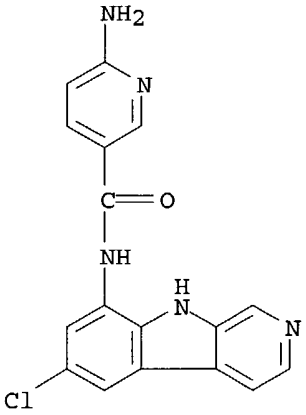
MF C17 H12 Cl N5 O



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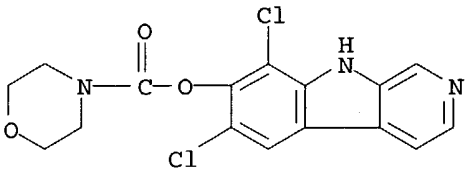

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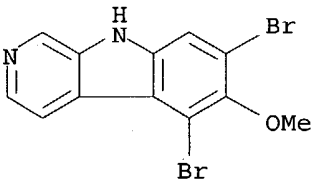

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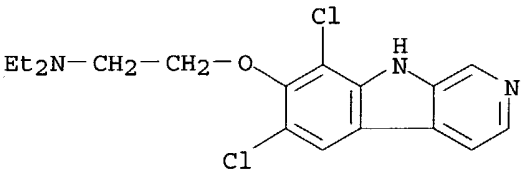
L116 135 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Ethanamine, 2-[(6,8-dichloro-9H-pyrido[3,4-b]indol-7-yl)oxy]-N,N-diethyl- (9CI)
MF C17 H19 Cl2 N3 O



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 08:59:52 ON 17 NOV 2004
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FILE COVERS 1907 - 17 Nov 2004 VOL 141 ISS 21
FILE LAST UPDATED: 16 Nov 2004 (20041116/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> => d l113 all fhitstr tot

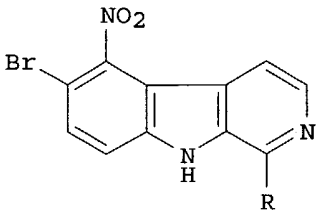
L113 ANSWER 1 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2004:390274 HCAPLUS
DN 140:357315
ED Entered STN: 14 May 2004
TI A process for the preparation of 6-bromo-5-nitro-1-(un)substituted-9H-pyrido[3,4-b]indoles as antifungal agents
IN Agarwal, Alka; Agarwal, Shiv Kumar; Shukla, Praveen Kumar; Khan, Zafar Kamal
PA Council of Scientific and Industrial Research, India
SO Indian, 8 pp.
CODEN: INXXAP
DT **Patent**
LA English
IC ICM C07D209-04
CC 28-2 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): **1**, 10
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	IN 178868	A	19970705	IN 1992-DE1123	19921130 <--
PRAI	IN 1992-DE1123		19921130 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
IN 178868	ICM	C07D209-04

OS CASREACT 140:357315; MARPAT 140:357315
GI



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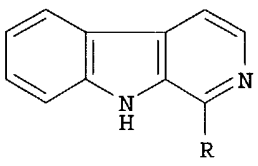
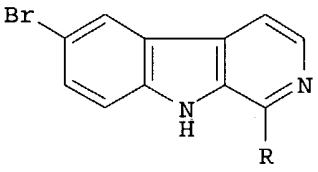


II



III

AB A process for the preparation of the title compds. [I; R = H, aryl] which comprises (1) treating 1-(un)substituted-9H-pyrido[3,4-b]indoles II with Br2 in an organic solvent like THF at ambient temperature for 2-6 h, to produce 6-bromo-1-(un)substituted-9H-pyrido[3,4-b]indoles III [R is as defined above], (ii) nitrating the compound III with concentrated HNO3 to produce compound I. Thus, treating 9H-pyrido[3,4-b]indole with Br2 in THF followed by nitration of the resulting 6-bromo-9H-pyrido[3,4-b]indole (74% yield) with concentrate HNO3 afforded 81% 6-bromo-5-nitro-9H-pyrido[3,4-b]indole. The compds. I were found to possess antifungal activity in vitro against Candida albicans, Cryptococcus neoformans, etc. at 1.56-50 μg/mL.

ST bromonitropyridoindole prepn fungicide; pyridoindole bromo nitro prepn fungicide

IT Fungicides
Mycosis
(a process for the preparation of 6-bromo-5-nitro-1-(un)substituted-9H-pyrido[3,4-b]indoles as antifungal agents)

IT **160065-90-7P** 160065-91-8P
RL: **PAC (Pharmacological activity)**; SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(a process for the preparation of 6-bromo-5-nitro-1-(un)substituted-9H-pyrido[3,4-b]indoles as antifungal agents)

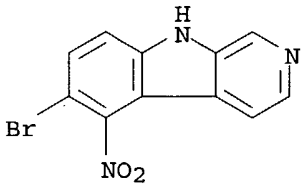
IT 244-63-3, 9H-Pyrido[3,4-b]indole 16765-79-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(a process for the preparation of 6-bromo-5-nitro-1-(un)substituted-9H-pyrido[3,4-b]indoles as antifungal agents)

IT **59444-69-8P** 160065-89-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(a process for the preparation of 6-bromo-5-nitro-1-(un)substituted-9H-pyrido[3,4-b]indoles as antifungal agents)

IT **160065-90-7P**
RL: **PAC (Pharmacological activity)**; SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(a process for the preparation of 6-bromo-5-nitro-1-(un)substituted-9H-pyrido[3,4-b]indoles as antifungal agents)

RN 160065-90-7 HCAPLUS

CN 9H-Pyrido[3,4-b]indole, 6-bromo-5-nitro- (9CI) (CA INDEX NAME)



L113 ANSWER 2 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2004:290502 HCAPLUS
DN 140:270863
ED Entered STN: 09 Apr 2004
TI A process for the preparation of 11-oxo-1-substituted-10,14-dihydropyrido[3,4-b]imidazo[1,2-c']quinazolo[4-5-e]indoles with antifilarial activity
IN Agarwal, Alka; Agarwal, Shiv Kumar; Bhakuni, Dewan Singh; Singh, Som Nath; Murthy, Puvada Kalpana; Chatterjee, Ranjit Kumar
PA Council of Scientific and Industrial Research, India
SO Indian, 18 pp.
CODEN: INXXAP
DT **Patent**
LA English
IC ICM A61K031-416
CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): **1**
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI IN 179786	A	19971206	IN 1991-DE1111	19911118 <--
PRAI IN 1991-DE1111		19911118 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
IN 179786	ICM	A61K031-416

OS CASREACT 140:270863; MARPAT 140:270863
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A process for the preparation of novel 11-oxo-1-substituted-10,14-dihydropyrido[3,4-b]imidazo[1,2-c']quinazolo[4,5-e]indoles I [R = H, alkyl, aryl, or substituted Ph], which have filaricidal activity, is disclosed. The process comprises 4 steps. In the first step, 6-amino-5-nitro-1-substituted-9H-pyrido[3,4-b]indoles II are condensed with 2-nitrobenzoyl chloride in the presence of a base and a known organic solvent at 0-20° to produce 6-[(2-nitrobenzoyl)amino]-5-nitro-1-substituted-9H-pyrido[3,4-b]indoles III. In the second step, hydrogenation of nitro compds. III over Raney Ni or Pd/C in the presence of an organic solvent like EtOH, MeOH, or AcOH, for 4-8 h at ambient temperature and 2-5 kg/cm2 pressure of H2 in a Parr hydrogenation apparatus furnishes the corresponding 6-[(2-aminobenzoyl)amino]-5-amino-1-substituted-9H-pyrido[3,4-b]indoles IV. In the third step, cyclization of amines IV with POCl3, neat in the presence of known organic solvents at 60-100°, and treatment of the obtained residue with a base, produces 2-(2-aminophenyl)-7-substituted-1(3),6-dihydropyrido[3,4-b]imidazo[4,5-e]indoles V. Finally, condensation of V with alkyl chloroformates in the presence of a base such as pyridine, and refluxing the reaction mixture for

6-12 h, gives I. In two examples, both I [R = H, Ph] were prepared In the case of I [R = Ph], yields in the 4 steps were 69%, 95%, 89%, and 89%, using Et chloroformate in the last step. In antifilarial rodent expts., a series of I were screened against Litomosoides carinii in cotton rats, and against Acanthocheilonema viteae and Brugia malayi in Mastomys natalensis. Some compds. I exhibited adulticidal activity (66.7%) against filarial parasites at 50 mg/kg i.p. and at 100 mg/kg orally.

ST pyridoimidazoquinazoloindole prepn antifilarial; pyrido imidazo quinazolo indole prepn filaricide

IT Anthelmintics
(filaricides; preparation of pyridoimidazoquinazoloindoles as antifilarial agents)

IT 157610-92-9P, 11-Oxo-10,14-dihydropyrido[3,4-b]imidazo[1,2-c']quinazolo[4,5-e]indole 157610-93-0P, 11-Oxo-1-phenyl-10,14-dihydropyrido[3,4-b]imidazo[1,2-c']quinazolo[4,5-e]indole 673434-38-3P, 11-Oxo-1-methyl-10,14-dihydropyrido[3,4-b]imidazo[1,2-c']quinazolo[4,5-e]indole 673434-39-4P, 11-Oxo-1-ethyl-10,14-dihydropyrido[3,4-b]imidazo[1,2-c']quinazolo[4,5-e]indole 673434-40-7P, 11-Oxo-1-propyl-10,14-dihydropyrido[3,4-b]imidazo[1,2-c']quinazolo[4,5-e]indole 673434-41-8P, 11-Oxo-1-isopropyl-10,14-dihydropyrido[3,4-b]imidazo[1,2-c']quinazolo[4,5-e]indole
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of pyridoimidazoquinazoloindoles as antifilarial agents)

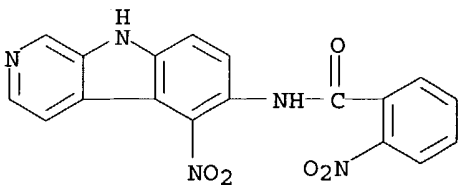
IT **157610-86-1P**, 6-[(2-Nitrobenzoyl)amino]-5-nitro-9H-pyrido[3,4-b]indole 157610-87-2P, 6-[(2-Nitrobenzoyl)amino]-5-nitro-1-phenyl-9H-pyrido[3,4-b]indole **157610-88-3P**, 6-[(2-Aminobenzoyl)amino]-5-amino-9H-pyrido[3,4-b]indole 157610-89-4P, 6-[(2-Aminobenzoyl)amino]-5-amino-1-phenyl-9H-pyrido[3,4-b]indole 157610-90-7P, 2-(2-Aminophenyl)-1(3),6-dihydropyrido[3,4-b]imidazo[4,5-e]indole 157610-91-8P, 2-(2-Aminophenyl)-7-phenyl-1(3),6-dihydropyrido[3,4-b]imidazo[4,5-e]indole
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of pyridoimidazoquinazoloindoles as antifilarial agents)

IT 79-22-1, Methyl chloroformate 541-41-3, Ethyl chloroformate 610-14-0, 2-Nitrobenzoyl chloride **131203-79-7**, 6-Amino-5-nitro-9H-pyrido[3,4-b]indole 131203-80-0, 6-Amino-5-nitro-1-phenyl-9H-pyrido[3,4-b]indole
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; preparation of pyridoimidazoquinazoloindoles as antifilarial agents)

IT **157610-86-1P**, 6-[(2-Nitrobenzoyl)amino]-5-nitro-9H-pyrido[3,4-b]indole
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of pyridoimidazoquinazoloindoles as antifilarial agents)

RN 157610-86-1 HCAPLUS

CN Benzamide, 2-nitro-N-(5-nitro-9H-pyrido[3,4-b]indol-6-yl)- (9CI) (CA INDEX NAME)



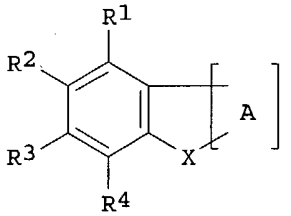
L113 ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:53620 HCAPLUS
DN 132:88209
ED Entered STN: 23 Jan 2000
TI Compounds having activity at imidazoline receptors for therapeutic use
IN Hudson, Alan T.
PA University of Bristol, UK
SO PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DT **Patent**
LA English
IC ICM C07D471-04
ICS C07D491-04; C07D495-04; A61K031-44
CC 1-12 (**Pharmacology**)
Section cross-reference(s): **63**
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000002878	A1	20000120	WO 1999-GB2218	19990712 <--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 9949190	A1	20000201	AU 1999-49190	19990712 <--
PRAI	GB 1998-15010		19980711	<--	
	GB 1999-2586		19990206	<--	
	WO 1999-GB2218		19990712	<--	

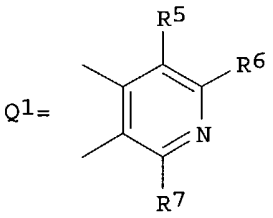
CLASS

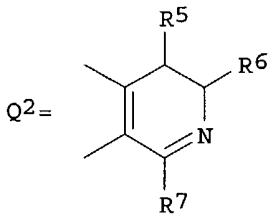
PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000002878	ICM	C07D471-04
	ICS	C07D491-04; C07D495-04; A61K031-44

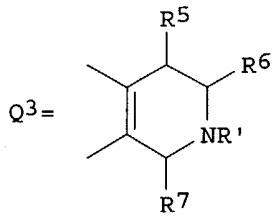
OS MARPAT 132:88209
GI



I







AB The invention concerns the use of I (X = NR, O, S; R = H, C1-6 alkyl, C1-7 acyl, C1-6 alkyloxycarbonyl, C2-6 alkenyl, C2-6 alkenylcarbonyl, C2-6 alkenyloxycarbonyl; A = ring forming a fused ring system with the ring containing X and is selected from Q1, Q2, Q3; R1-R7 = H, C1-6 alkyl, OH, NH2, etc.; R' = H, C1-6 alkyl, C1-7 acyl, etc.) in the manufacture of a medicament for the treatment or prevention of a disease or a disorder by selective action at an imidazoline receptor. The compds. of the invention include e.g. β-carboline derivs.

ST imidazoline receptor compd therapeutic; beta carboline therapeutic imidazoline receptor

IT Imidazoline receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(I1; imidazoline receptor-active compds. for therapeutic use)

IT Imidazoline receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(I2; imidazoline receptor-active compds. for therapeutic use)

IT Brain
Kidney
(imidazoline receptor-active compds. for therapeutic use)

IT Benzodiazepine receptors
Imidazoline receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(imidazoline receptor-active compds. for therapeutic use)

IT Drug delivery systems
(prodrugs; imidazoline receptor-active compds. for therapeutic use)

IT 244-63-3, Norharmane 304-21-2, Harmaline **442-51-3**, Harmine 486-84-0, Harmane 525-57-5, Harmalol 16502-01-5, Noreleagnine 20315-68-8, Pinoline 74214-62-3, Ethyl β-carboline-3-carboxylate 91985-74-9, 3-Methoxycarbonylamino-β-carboline
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); PROC (Process); USES (Uses)
(imidazoline receptor-active compds. for therapeutic use)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

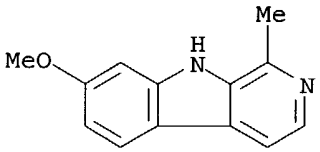
RE

(1) Budavari, S; AN ENCYCLOPEDIA OF CHEMICALS DRUGS AND BIOLOGICALS 12TH EDITION P35
(2) Carpene, C; 1995, 17, P79 HCAPLUS
(3) Carpene, C; J PHARMACOL EXP THER 1995, V272(2), P681 HCAPLUS
(4) Molderings, G; 1995, 7, HCAPLUS
(5) Molderings, G; NAUNYN-SCHMIEDEBERG'S ARCH PHARMACOL 1995, V351(5), P507 HCAPLUS
(6) Szabo, B; ARZNEIMITTEL FORSCHUNG DRUG RESEARCH 1997, V47(9), P1009 HCAPLUS

IT **442-51-3**, Harmine
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); PROC (Process); USES (Uses)
(imidazoline receptor-active compds. for therapeutic use)

RN 442-51-3 HCAPLUS

CN 9H-Pyrido[3,4-b]indole, 7-methoxy-1-methyl- (8CI, 9CI) (CA INDEX NAME)



L113 ANSWER 4 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:49269 HCAPLUS
DN 126:152816
ED Entered STN: 23 Jan 1997
TI Method of treating chemical dependency using β-carboline alkaloids, derivatives and salts thereof
IN Lotsof, Howard S.
PA NDA International, Inc., USA
SO U.S., 6 pp.
CODEN: USXXAM
DT **Patent**
LA English
IC ICM A61K031-55
ICS A61K031-44
NCL 514214000
CC 1-11 (**Pharmacology**)
Section cross-reference(s): 4
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5591738	A	19970107	US 1994-322490	19941014 <--
PRAI US 1994-322490		19941014 <--		

CLASS

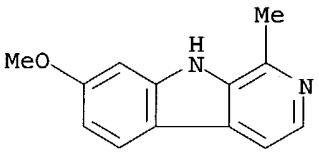
PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 5591738	ICM	A61K031-55
	ICS	A61K031-44
	NCL	514214000

OS MARPAT 126:152816
AB A method of treating a chemical dependency disorder, an abuse syndrome or a combination thereof in a mammal in need thereof, comprises administering (1) an effective amount of a β-carboline alkaloid, hydrolyzable derivative or pharmaceutically-acceptable salt thereof, such as harmaline, harmine, tetrahydroharmine, tetrahydronorharman, harmol, harmalol, Et harmol, Pr harmol, iso-Pr harmol, and Bu harmol and (2) an effective amount of a noribogaine compound
ST drug dependence carboline alkaloid noribogaine
IT Alcoholism
Drug dependence
(chemical dependency treatment with β-carboline alkaloids and noribogaine derivs.)
IT Alkaloids, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pyridoindole; chemical dependency treatment with β-carboline alkaloids and noribogaine derivs.)
IT 50-36-2, Cocaine 64-17-5, Ethanol, biological studies 300-62-9, Amphetamine 561-27-3, Heroin 33817-09-3
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(chemical dependency treatment with β-carboline alkaloids and noribogaine derivs.)
IT 304-21-2, Harmaline 363-11-1, Harmaline hydrochloride **442-51-3**

, Harmine 481-88-9, Noribogaine **487-03-6**, Harmol 525-57-5, Harmalol **10593-56-3 10593-57-4 15467-58-0** 16502-01-5, Tetrahydronorharman 17019-01-1, Tetrahydroharmine 176916-14-6, O-Benzoylnoribogaine **186790-81-8**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(chemical dependency treatment with β-carboline alkaloids and noribogaine derivs.)

IT **442-51-3**, Harmine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(chemical dependency treatment with β-carboline alkaloids and noribogaine derivs.)

RN 442-51-3 HCAPLUS
CN 9H-Pyrido[3,4-b]indole, 7-methoxy-1-methyl- (8CI, 9CI) (CA INDEX NAME)



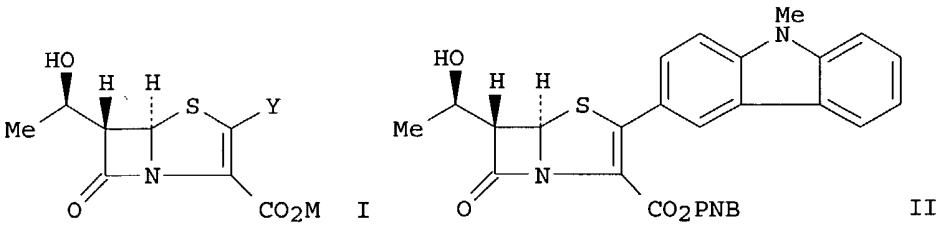
L113 ANSWER 5 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:452769 HCAPLUS
DN 125:167688
ED Entered STN: 01 Aug 1996
TI Synthesis of carbapenem antibiotics substituted at the 2-position with carboline derivs.
IN Dininno, Frank P.; Guthikonda, Ravindra N.; Meurer, Laura C.
PA Merck and Co., Inc., USA
SO U.S., 74 pp.
CODEN: USXXAM
DT **Patent**
LA English
IC ICM C07D487-04
ICS A61K031-40
NCL 514210000
CC 26-5 (Biomolecules and Their Synthetic Analogs)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5532261	A	19960702	US 1994-353868	19941212 <--
PRAI US 1994-353868		19941212 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 5532261	ICM	C07D487-04
	ICS	A61K031-40
	NCL	514210000

OS MARPAT 125:167688
GI



AB Carbapenem antibiotics I [Y = (un)substituted carboline, M = H, neg. charge, protective group] or a pharmaceutically acceptable salt are disclosed. The first stage involves synthesis of the carboline ring system, e.g., 9-methyl-α-carboline is 6-brominated and then converted to its trimethylstannane and coupled with 2-oxocarbapenam to give carbapenem II.

ST carbapenem antibiotic prepn

IT 5470-18-8 6911-87-1 13091-23-1 14757-68-7 17965-99-0 26066-88-6
59444-69-8 66584-32-5 75363-99-4 162975-75-9 180084-84-8
180084-87-1 180087-62-1 180087-64-3 180087-66-5 180087-67-6
180087-69-8 180087-71-2 180087-73-4 180087-74-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis of carbapenem antibiotics substituted at the 2-position with carboline derivs.)

IT **59444-70-1P** 162975-61-3P 162975-64-6P 180084-81-5P
180084-82-6P 180084-88-2P 180085-04-5P 180085-05-6P 180085-06-7P
180085-07-8P 180085-12-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of carbapenem antibiotics substituted at the 2-position with carboline derivs.)

IT 180084-90-6P 180084-92-8P 180084-94-0P 180085-01-2P 180085-08-9P
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(synthesis of carbapenem antibiotics substituted at the 2-position with carboline derivs.)

IT 162975-62-4P 162975-63-5P 162975-69-1P 180084-83-7P 180085-16-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of carbapenem antibiotics substituted at the 2-position with carboline derivs.)

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RL: SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis of carbapenem antibiotics substituted at the 2-position with carboline derivs.)

IT 180087-28-9P 180087-29-0P 180087-30-3P 180087-31-4P 180087-32-5P
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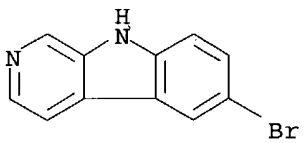
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis of carbapenem antibiotics substituted at the 2-position with carboline derivs.)

IT **59444-69-8**

RL: RCT (Reactant); **THU (Therapeutic use)**
(synthesis of carbapenem antibiotics substituted at the 2-position with carboline derivs.)

RN 59444-69-8 HCAPLUS
CN 9H-Pyrido[3,4-b]indole, 6-bromo- (9CI) (CA INDEX NAME)



L113 ANSWER 6 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:337930 HCAPLUS
DN 125:58487
ED Entered STN: 11 Jun 1996

TI Preparation of cycloalkanoindole and -azaindole derivatives as inhibitors of ApoB-100 associated lipoprotein production and/or release.

IN Mueller, Ulrich; Connell, Richard; Goldmann, Siegfried; Gruetzmann, Rudi; Beuck, Martin; Bischoff, Hilmar; Denzer, Dirk; Domdey-Bette, Anke; Wohlfeil, Stefan

PA Bayer A.-G., Germany

SO Eur. Pat. Appl., 114 pp.
CODEN: EPXXDW

DT **Patent**

LA German

IC ICM C07D471-04
ICS A61K031-44

ICI C07D471-04, C07D221-00, C07D209-00

CC 28-2 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): **1**

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	EP 705831	A3	19970122		
	EP 705831	B1	20031203		
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	AT 255580	E	20031215	AT 1995-114877	19950921 <--
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	ES 2211890	T3	20040716	ES 1995-114877	19950921 <--
	AU 9532920	A1	19960418	AU 1995-32920	19950927 <--
	AU 700609	B2	19990107		
	HR 950505	B1	20020430	HR 1995-950505	19950927 <--
	US 5684014	A	19971104	US 1995-535698	19950928 <--
	CA 2159546	AA	19960405	CA 1995-2159546	19950929 <--
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	IL 129641	A1	20000831	IL 1995-129641	19951002 <--
	TW 448175	B	20010801	TW 1995-84110247	19951002 <--
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	ZA 9508297	A	19960506	ZA 1995-8297	19951003 <--
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	CN 1050605	B	20000322		
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	US 6479503	B2	20021112		
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CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 705831	ICM	C07D471-04

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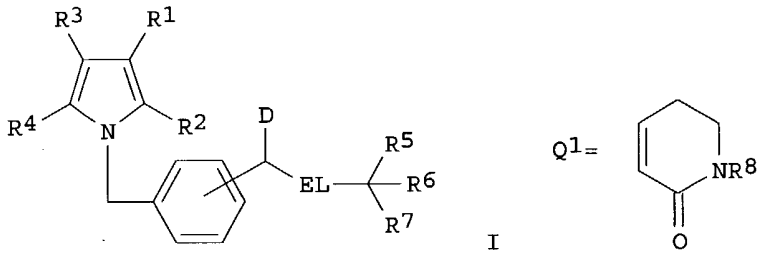

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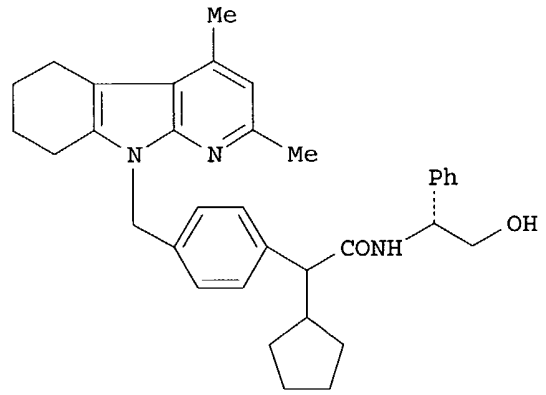

II

AB Title compds. [I; R1R2 = atoms to form a (substituted) pyridyl ring, Ph ring, Q1; R8 = H, alkyl; R3R4 = atoms to form a (substituted) Ph ring, 4-8 membered cycloalkene, oxacycloalkene ring; D = H, alkyl, cycloalkyl; E = CO, CS; L = O, S, NR9; R9 = H, (substituted) alkyl; R5 = (substituted) Ph, 5-7 membered heterocyclyl; R6 = H, CO2H, alkoxycarbonyl, (substituted) alkyl; R7 = H; R6R7 = O], were prepared Thus, title compound (II) (preparation given) inhibited release of ApoB-100 associated lipoproteins from human liver cells with IC50 = 28 + 10-9 M.

ST cycloalkanoazaindole prepn lipoprotein prodn inhibitor; antiatherosclerotic cycloalkanoazaindole prepn

IT Lipoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(preparation of cycloalkanoindole and -azaindole derivs. as inhibitors of ApoB-100 associated lipoprotein production and/or release)

IT Antiarteriosclerotics
(antiatherosclerotics, preparation of cycloalkanoindole and -azaindole derivs. as inhibitors of ApoB-100 associated lipoprotein production and/or release)

IT 177276-66-3P 177276-67-4P 177276-68-5P 177276-69-6P 177276-70-9P
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177470-14-3P 177470-15-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of cycloalkanoindole and -azaindole derivs. as inhibitors of ApoB-100 associated lipoprotein production and/or release)

IT 93-56-1 108-94-1, Cyclohexanone, reactions 137-43-9, Cyclopentyl bromide 372-48-5, 2-Fluoropyridine 622-47-9, 4-Methylphenylacetic acid 1125-99-1, 1-Pyrrolidinocyclohexene 1485-70-7, N-Benzylbenzamide 1603-41-4, 2-Amino-5-methylpyridine 4184-79-6, 5,6-Dimethylbenzotriazole 5407-87-4, 6-Amino-2,4-lutidine 7076-11-1 26906-01-4 30282-14-5 43189-24-8 56613-80-0 58596-88-6 60615-96-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of cycloalkanoindole and -azaindole derivs. as inhibitors of ApoB-100 associated lipoprotein production and/or release)

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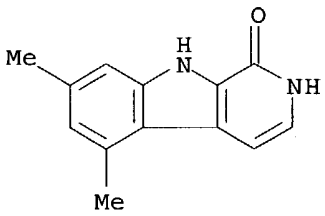
177279-18-4P 177279-19-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of cycloalkanoindole and -azaindole derivs. as inhibitors of ApoB-100 associated lipoprotein production and/or release)

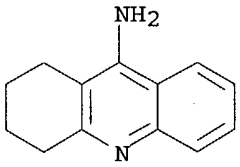
IT **177278-98-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of cycloalkanoindole and -azaindole derivs. as inhibitors of ApoB-100 associated lipoprotein production and/or release)

RN 177278-98-7 HCAPLUS
CN 1H-Pyrido[3,4-b]indol-1-one, 2,9-dihydro-5,7-dimethyl- (9CI) (CA INDEX NAME)



L113 ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1993:96860 HCAPLUS
DN 118:96860
ED Entered STN: 19 Mar 1993
TI Inhibition of histamine-N-methyltransferase (HNMT) by fragments of 9-amino-1,2,3,4-tetrahydroacridine (tacrine) and by β-carbolines
AU Cumming, Paul; Vincent, Steven R.
CS Montreal Neurol. Inst., Montreal, QC, H3A 2B4, Can.
SO Biochemical Pharmacology (**1992**), 44(5), 989-92
CODEN: BCPCA6; ISSN: 0006-2952
DT Journal
LA English
CC 7-3 (Enzymes)
Section cross-reference(s): **1**
AB Histamine-N-methyltransferase (HNMT), the major enzyme for the metabolism of histamine in rat brain, was potently inhibited by 9-amino-1,2,3,4-tetrahydroacridine (tacrine). Structural fragments of tacrine were less potent inhibitors of rat brain HNMT than was tacrine itself. Harmaline and a number of other β-carbolines inhibited HNMT with IC50 values in the range of 1-10 μM. HNMT inhibition by harmaline was competitive with respect to both substrates, S-adenosylmethionine and histamine (Ki = 1.4 μM). These findings were discussed in the context of mechanisms for HNMT inhibition.
ST histamine methyltransferase brain inhibition tacrine carboline; harmaline inhibition histamine methyltransferase brain
IT Brain, composition
(histamine methyltransferase of, inhibition of, by tacrine and its fragments and carbolines, compound structure in relation to)
IT Kinetics, enzymic
(of inhibition, of histamine methyltransferase of brain, by harmaline)
IT Molecular structure-biological activity relationship

(histamine methyltransferase-inhibiting, of tacrine and its fragments and carbolines)
IT Alkaloids, biological studies
RL: BIOL (Biological study)
(pyridoindole, histamine methyltransferase of brain inhibition by, structure in relation to)
IT 56-54-2, Quinidine 90-45-9, 9-Aminoacridine 244-63-3, Norharmane 304-21-2, Harmaline **321-64-2**, Tacrine **442-51-3**, Harmine 462-08-8, 3-Aminopyridine 486-84-0, Harmane **487-03-6**, Harmol 504-24-5, 4-Aminopyridine 525-57-5, Harmalol 578-66-5, 8-Aminoquinoline 580-15-4, 6-Aminoquinoline 6628-04-2 54012-92-9 62450-07-1
RL: BIOL (Biological study)
(histamine methyltransferase of brain inhibition by, structure in relation to)
IT 9029-80-5, Histamine N-methyltransferase
RL: PROC (Process)
(inhibition of, of brain by tacrine and its fragments and carbolines, compound structure in relation to)
IT **321-64-2**, Tacrine
RL: BIOL (Biological study)
(histamine methyltransferase of brain inhibition by, structure in relation to)
RN 321-64-2 HCAPLUS
CN 9-Acridinamine, 1,2,3,4-tetrahydro- (9CI) (CA INDEX NAME)



L113 ANSWER 8 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1990:55601 HCAPLUS
DN 112:55601
ED Entered STN: 17 Feb 1990
TI Preparation of bromine-containing pyridoindoles
IN Kobayashi, Junichi; Ishibashi, Masami; Ooizumi, Yasushi
PA Mitsubishi Kasei Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
IC ICM C07D471-04
ICA A61K031-435
CC 27-11 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): **1**
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01197482	A2	19890809	JP 1988-21339	19880202 <--
	JP 2579789	B2	19970212		

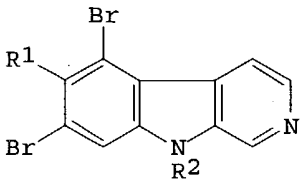
PRAI JP 1988-21339 19880202 <--

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 01197482	ICM	C07D471-04
	ICA	A61K031-435

OS MARPAT 112:55601

GI



I

AB The title compds. I (R1 = AcO, OH; R2 = Me, H; when R1 = OH, R2 = Me) having Ca-releasing effects on muscle endoplasmic reticulums were prepared Thus, 529 mg I (R1 = MeO, R2 = H) was demethylated by refluxing in CH2Cl2 in the presence of BBr3 to give 409 mg I (R1 = OH, R2 = H), which was acetylated by Ac2O in the presence of pyridine to give 19 mg I (R1 = AcO, R2 = H) (II). Then, 11.8 mg II was methylated with MeI in THF in the presence of NaH to give I (R1 = AcO, R2 = Me), which was then hydrolyzed in aqueous KOH/MeOH to give 5.2 mg I (R1 = OH, R2 = Me) (III). III showed min. effective concentration of 0.6 μM for Ca-release from rabbit muscle endoplasmic reticulum , vs. 0.6 mM for caffeine, in vitro.

ST bromopyridoindole prepn calcium releasing effect; pyridoindole prepn calcium releasing effect; indole dibromo prepn calcium release; muscle endoplasmic reticulum calcium release

IT Muscle, metabolism
(calcium release from endoplasmic reticulum of, by dibromopyridoindoles)

IT Endoplasmic reticulum
(muscle, calcium release from, by dibromopyridoindoles)

IT Biological transport
(channel-mediated, calcium release from muscle endoplasmic reticulum, by dibromopyridoindoles)

IT **30684-42-5**, 6-Methoxypyrido[3,4-b]indole
RL: RCT (Reactant); RACT (Reactant or reagent)
(bromination of)

IT **101927-49-5P**, 5,7-Dibromo-6-hydroxypyrido[3,4-b]indole
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and acetylation of)

IT **123363-40-6P**, 5,7-Dibromo-6-hydroxy-9-methylpyrido[3,4-b]indole
123363-41-7P, 5,7-Dibromo-6-acetoxypyrido[3,4-b]indole
124900-27-2P, 5,7-Dibromo-6-acetoxy-9-methylpyrido[3,4-b]indole
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and calcium releasing activity of)

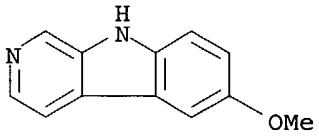
IT **113960-66-0P**, 5,7-Dibromo-6-methoxypyrido[3,4-b]indole
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and demethylation of)

IT 7440-70-2P, Calcium, preparation
RL: PREP (Preparation)
(release of, from muscle endoplasmic reticulum, by dibromopyridoindoles)

IT **30684-42-5**, 6-Methoxypyrido[3,4-b]indole
RL: RCT (Reactant); RACT (Reactant or reagent)
(bromination of)

RN 30684-42-5 HCAPLUS

CN 9H-Pyrido[3,4-b]indole, 6-methoxy- (8CI, 9CI) (CA INDEX NAME)



L113 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1985:487857 HCAPLUS
DN 103:87857
ED Entered STN: 22 Sep 1985
TI Substituted β-carbolines and their use in treatment of the central nervous system
IN Huth, Andreas; Schmiechen, Ralph; Rahtz, Dieter; Seidelmann, Dieter; Braestrup, Claus Thyco
PA Schering A.-G. , Fed. Rep. Ger.
SO Ger. Offen., 35 pp.
CODEN: GWXXBX
DT **Patent**
LA German
IC ICM C07D471-04
ICS A61K031-435
CC 28-2 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): **1**
FAN.CNT 1

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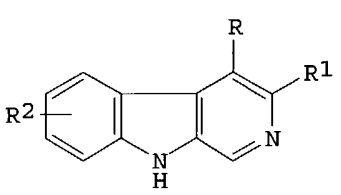
PI	DE 3335323	A1	19850404	DE 1983-3335323	19830927 <--
	EP 137390	A1	19850417	EP 1984-111337	19840922 <--
	EP 137390	B1	19900816		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	AT 55604	E	19900915	AT 1984-111337	19840922 <--
	DK 8404564	A	19850328	DK 1984-4564	19840925 <--
	DK 170256	B1	19950717		
	ES 536199	A1	19850601	ES 1984-536199	19840925 <--
	DD 223714	A5	19850619	DD 1984-267607	19840925 <--
	NO 8403861	A	19850328	NO 1984-3861	19840926 <--
	NO 160998	B	19890313		
	NO 160998	C	19890621		
	FI 8403777	A	19850328	FI 1984-3777	19840926 <--
	AU 8433570	A1	19850404	AU 1984-33570	19840926 <--
	AU 578043	B2	19881013		
	HU 35673	O	19850729	HU 1984-3650	19840926 <--
	HU 200457	B	19890130		
	US 4623649	A	19861118	US 1984-654594	19840926 <--
	IL 73071	A1	19880630	IL 1984-73071	19840926 <--
	CA 1263394	A1	19891128	CA 1984-464082	19840926 <--
	ZA 8407619	A	19850529	ZA 1984-7619	19840927 <--
	JP 60100577	A2	19850604	JP 1984-200717	19840927 <--
	JP 05086390	B4	19931210		
PRAI	DE 1983-3335323		19830927 <--		
	EP 1984-111337		19840922 <--		

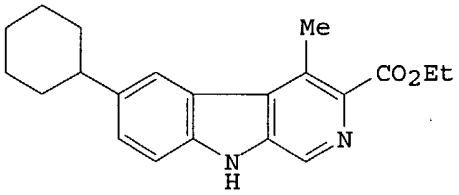
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
DE 3335323	ICM	C07D471-04
	ICS	A61K031-435

OS CASREACT 103:87857
GI



I



II

AB The title compds. [I; R = H, alkyl, alkoxymethyl; R1 = substituted 1,2,4-oxadiazol-5-yl; R2 = (un)substituted hydrocarbyl, S-containing heterocycyl] were prepared Thus, Et 6-iodo-4-methyl-β-carboline-3-carboxylate was alkylated by cyclohexene in DMF in the presence of Et3N, Pd(OAc)2, and (2-MeC6H4)3P and the cyclohexenyl derivative hydrogenated over Raney Ni in EtOH to give cyclohexyl-β-carboline II. In mice II inhibited brain uptake of flunitrazepam with an ED50 of 4.7 mg/kg s.c.

ST pyridoindolecarboxylate prepn tranquilizer; alkenylation carbolinecarboxylate; propionamidoxime cyclocondensation carbolinecarboxylate; oxadiazole pyridoindolyl

IT Alkenylation
(of iodopyridoindolecarboxylates)

IT Cyclocondensation reaction
(of pyridoindolecarboxylates with propionamidoxime)

IT Tranquilizers and Neuroleptics
(pyridoindolecarboxylates)

IT Substitution reaction
(cycloalkenylation, of iodopyridoindolecarboxylates)

IT 96832-74-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(alkenylation of)

IT 78-79-5, reactions 110-83-8, reactions 513-42-8 592-99-4 628-92-2 695-12-5 930-68-7 931-88-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(alkenylation of iodopyridoindolecarboxylate by)

IT 110-64-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(alkenylation of pyridoindolecarboxylate by)

IT 298-12-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with (indolyloxy)butyrate derivative)

IT 87824-17-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with benzylindole)

IT 50614-90-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with hydroxybutyrate derivative)

IT 35577-92-5 97820-51-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclocondensation of, with diaminoacrylate derivative)

IT 74119-32-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclocondensation of, with indoles)

IT 29335-36-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclocondensation of, with pyridoindolecarboxylates)

IT 97820-50-3 97820-52-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(hydrogenation of)

IT 97820-54-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and condensation of, with glyoxylate)

IT 97820-53-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrogenation of)

IT 97820-18-3P 97820-19-4P 97820-25-2P 97820-26-3P 97820-31-0P
97820-32-1P 97820-33-2P 97820-34-3P 97820-35-4P 97820-36-5P
97820-37-6P 97820-38-7P 97820-39-8P 97820-40-1P 97820-41-2P
97820-42-3P 97820-43-4P 97820-44-5P 97820-45-6P 97820-46-7P
97820-47-8P 97820-48-9P 97820-49-0P 97820-56-9P 97820-57-0P
97839-45-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and tranquilizer activity of)

IT 97820-28-5P 97820-29-6P 97820-30-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, cyclocondensation reaction, and tranquilizer activity of)

IT 97820-55-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, decarboxylation, and dehydrogenation of)

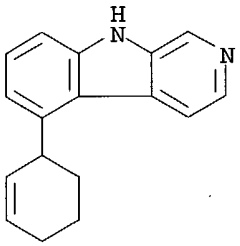
IT 97820-20-7P 97820-21-8P **97820-22-9P** 97820-27-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, hydrogenation, and tranquilizer activity of)

IT 97820-23-0P 97820-24-1P 97820-94-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, saponification, and tranquilizer activity of)

IT 74214-62-3 78539-02-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(tert-butylation of)

IT **97820-22-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, hydrogenation, and tranquilizer activity of)

RN 97820-22-9 HCAPLUS
CN 9H-Pyrido[3,4-b]indole, 5-(2-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)



L113 ANSWER 10 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1985:442702 HCAPLUS
DN 103:42702
ED Entered STN: 10 Aug 1985
TI High-performance liquid chromatographic analysis of basic drugs on silica columns using non-aqueous ionic eluents. II. Application of UV, fluorescence and electrochemical oxidation detection
AU Jane, I.; McKinnon, A.; Flanagan, R. J.
CS Metrop. Police Forensic Sci. Lab., London, SE1 7LP, UK
SO Journal of Chromatography (**1985**), 323(2), 191-225
CODEN: JOCRAM; ISSN: 0021-9673
DT Journal
LA English

CC 64-1 (**Pharmaceutical** Analysis)
Section cross-reference(s): 4

AB Unmodified silica columns together with nonaq. ionic eluents give stable yet flexible systems for the anal. of basic drugs by HPLC. Low-wavelength UV and fluorescence detection may be used, and fluorescence may be optimized by, post-column pH change or derivatization of some primary aliphatic amines with o-phthaldialdehyde [643-79-8]. A novel feature is that electrochem. oxidation can be used for the detection of most analytes and this detection mode is thus discussed in detail. Retention and relative response data (UV, 254 nm and electrochem., +1.2 V) were generated for 462 compds. using a 125-mm Spherisorb S5W silica column and methanolic NH_4ClO_4 (10 mM, pH 6.7) as eluent. This system can be used isocratically in qual. analyses and also for quant. work, when either the wavelength or the applied potential can be adjusted to optimize the response.

ST HPLC drug analysis; liq chromatog drug analysis; silica column drug liq chromatog; UV detection drug HPLC; fluorescence detection drug HPLC; electrochem oxidn drug HPLC

IT Pharmaceutical analysis
(basic drugs determination in, by HPLC on silica columns using nonaq. ionic eluents with electrochem. oxidation and fluorescence and UV detection)

IT Amines, analysis
RL: ANST (Analytical study)
(determination of pharmaceutical, by HPLC on silica columns using nonaq. ionic eluents, electrochem. oxidation and fluorescence and UV detection in)

IT Cephalins
RL: ANT (Analyte); ANST (Analytical study)
(determination of, by HPLC on silica columns, electrochem. oxidation and fluorescence and UV detection in)

IT Oxidation, electrochemical
(of basic drugs, HPLC on silica columns in relation to)

IT Spectrochemical analysis
(UV, for basic drugs, in HPLC on silica columns using nonaq. ionic eluents)

IT Spectrochemical analysis
(fluorometric, for basic drugs, in HPLC on silica columns using nonaq. ionic eluents)

IT Chromatography, column and liquid
(high-performance, of basic drugs on silica columns using nonaq. ionic eluents, electrochem. oxidation and fluorescence and UV detection in)

IT 643-79-8
RL: ANST (Analytical study)
(amines derivatization with, in HPLC anal. of drugs on silica columns, electrochem. oxidation and fluorescence and UV detection in relation to)

IT 7631-86-9, uses and miscellaneous
RL: USES (Uses)
(columns, HPLC anal. of basic drugs on, electrochem. oxidation and fluorescence and UV detection in)

IT 50-36-2 50-37-3 50-47-5 50-48-6 50-49-7 50-52-2 50-53-3, analysis 50-60-2 51-06-9 51-12-7 51-34-3 51-55-8, analysis 51-61-6, analysis 51-67-2 51-68-3 51-71-8 52-53-9 52-86-8 54-04-6 54-05-7 54-11-5 54-32-0 54-49-9 54-80-8 56-54-2 57-24-9 57-27-2, analysis 57-42-1 57-47-6 58-00-4 58-08-2, analysis 58-14-0 58-15-1 58-32-2 58-38-8 58-39-9 58-40-2 58-55-9, analysis 58-73-1 58-74-2 59-32-5 59-41-6 59-42-7 59-43-8, analysis 59-46-1 59-47-2 59-66-5 59-96-1 59-98-3 59-99-4 60-40-2 60-79-7 60-80-0 60-87-7 60-89-9 60-91-3 60-99-1 61-00-7 61-01-8 61-54-1 62-67-9 63-12-7 64-04-0 64-13-1 64-39-1 64-86-8 64-95-9 65-64-5 68-88-2 69-23-8 71-81-8 72-44-6 72-69-5 76-41-5 76-42-6 76-57-3 76-58-4 76-99-3 76-99-3D, metabolite 1 77-07-6 77-10-1 77-14-5 77-15-6 77-17-8 77-19-0 77-20-3 77-37-2 77-38-3 82-54-2 82-58-6

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477-93-0 478-94-4 481-37-8 482-15-5 483-18-1 485-71-2 486-12-4
RL: ANT (Analyte); ANST (Analytical study)
(determination of, by HPLC on silica columns, electrochem. oxidation and fluorescence and UV detection in)

IT 486-16-8 486-56-6 487-93-4 493-80-1 493-92-5 495-83-0 499-67-2
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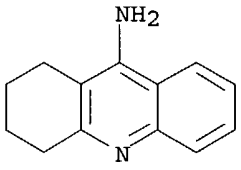
RL: ANT (Analyte); ANST (Analytical study)
(determination of, by HPLC on silica columns, electrochem. oxidation and fluorescence and UV detection in)

IT **321-64-2**
RL: ANT (Analyte); ANST (Analytical study)
(determination of, by HPLC on silica columns, electrochem. oxidation and fluorescence and UV detection in)

RN 321-64-2 HCAPLUS
CN 9-Acridinamine, 1,2,3,4-tetrahydro- (9CI) (CA INDEX NAME)



L113 ANSWER 11 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1985:226023 HCAPLUS
DN 102:226023
ED Entered STN: 29 Jun 1985
TI Antibiotics eudistomins
IN Rinehart, Kenneth Lloyd
PA University of Illinois, USA
SO Eur. Pat. Appl., 35 pp.
CODEN: EPXXDW
DT **Patent**
LA English
IC ICM C07D471-04
ICS C07D515-14
ICA A61K031-435; A61K031-55
ICI C07D471-04, C07D221-00, C07D209-00; C07D515-14, C07D291-00, C07D221-00, C07D209-00
CC 63-3 (**Pharmaceuticals**)
Section cross-reference(s): 10, 12, 16, 31
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 133000	A2	19850213	EP 1984-304968	19840720 <--
	EP 133000	A3	19860305		
	EP 133000	B1	19900926		
	R: BE, CH, DE, FR, GB, IT, LI, NL, SE				
	US 4631149	A	19861223	US 1984-578443	19840209 <--
	JP 60100576	A2	19850604	JP 1984-152212	19840724 <--
	JP 05016428	B4	19930304		
PRAI	US 1983-517117		19830725 <--		
	US 1984-578443		19840209 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 133000	ICM	C07D471-04
	ICS	C07D515-14
	ICA	A61K031-435; A61K031-55
	ICI	C07D471-04, C07D221-00, C07D209-00; C07D515-14, C07D291-00, C07D221-00, C07D209-00

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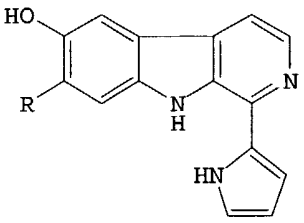


I, R=Br
II, R=H

AB Eudistomins were isolated from Eudistoma olivaceum by extraction and chromatog. and had antiviral, antibacterial, and antitumor activity as tested against a number of organisms. The various eudistomins, e.g. eudistomin A (I) [88704-36-3] and eudistomin M (II) [88704-39-6], or their pharmaceutically acceptable salts were formulated into suitable dosage forms. E.g., 1000 gelatin capsules were prepared from a micronized eudistomin 100, lactose 100, com starch 20, talc 20, and Mg stearate 2 g. These capsules were administered at a dose of 1-2 capsules 4 times/day to prevent or treat viral infections.

ST eudistomin antibiotic formulation; Eudistoma alkaloid antibiotic; pyridoindole antibiotic

IT Eudistoma olivaceum
(eudistomins of, antibiotic activity and structure of, for pharmaceuticals)

IT Antibiotics
(eudistomins, antibiotic activity and structure of, for pharmaceuticals)

IT Molecular structure, natural product
(of eudistomin A (alkaloid))

IT Molecular structure, natural product
(of eudistomin B (alkaloid))

IT Molecular structure, natural product
(of eudistomin C (alkaloid))

IT Molecular structure, natural product
(of eudistomin D (alkaloid))

IT Molecular structure, natural product
(of eudistomin E (alkaloid))

IT Molecular structure, natural product
(of eudistomin F (alkaloid))

IT Molecular structure, natural product
(of eudistomin G (alkaloid))

IT Molecular structure, natural product
(of eudistomin H (alkaloid))

IT Molecular structure, natural product
(of eudistomin I (alkaloid))

IT Molecular structure, natural product
(of eudistomin J (alkaloid))

IT Molecular structure, natural product
(of eudistomin K (alkaloid))

IT Molecular structure, natural product
(of eudistomin L (alkaloid))

IT Molecular structure, natural product
(of eudistomin M (alkaloid))

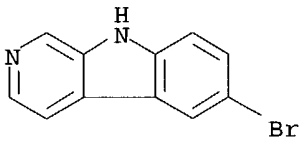
IT Molecular structure, natural product
(of eudistomin N (alkaloid))

IT Molecular structure, natural product
(of eudistomin O (alkaloid))

IT Molecular structure, natural product
(of eudistomin P (alkaloid))

IT Molecular structure, natural product
(of eudistomin Q (alkaloid))

IT Alkaloids, biological studies
RL: BIOL (Biological study)
(pyridoindole, of Eudistoma olivaceum, antibiotic activity and structure of, for pharmaceuticals)
IT **59444-69-8** 88704-36-3 **88704-37-4 88704-38-5**
88704-39-6 **88704-40-9** 88704-43-2 88704-44-3 88704-45-4
88704-48-7 88704-49-8 88704-50-1 88704-51-2 88704-52-3
88704-55-6 96426-92-5 96426-93-6
RL: BIOL (Biological study)
(of Eudistoma olivaceum, antibiotic activity and structure of, for pharmaceuticals)
IT **88704-41-0P** 88704-42-1P 88704-46-5P 88704-47-6P
88704-53-4P 88704-54-5P **88729-60-6P** 88729-61-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and antibiotic activity of, for pharmaceuticals)
IT **59444-69-8**
RL: BIOL (Biological study)
(of Eudistoma olivaceum, antibiotic activity and structure of, for pharmaceuticals)
RN 59444-69-8 HCAPLUS
CN 9H-Pyrido[3,4-b]indole, 6-bromo- (9CI) (CA INDEX NAME)



L113 ANSWER 12 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1985:154850 HCAPLUS
DN 102:154850
ED Entered STN: 04 May 1985
TI Application of principal components analysis to TLC data for 596 basic and neutral drugs in four eluent systems
AU Musumarra, Giuseppe; Scarlata, Giuseppe; Romano, Guido; Clementi, Sergio; Wold, Svante
CS Ist. Dip. Chim. Chim. Ind., Univ. Catania, Catania, 95125, Italy
SO Journal of Chromatographic Science (**1984**), 22(12), 538-47
CODEN: JCHSBZ; ISSN: 0021-9665
DT Journal
LA English
CC 64-1 (**Pharmaceutical** Analysis)
AB Principal component anal. of the Rf values for 596 basic and neutral drugs in 4 eluent mixts. provided a significant 2-component model which explained 77% of the total variance. Each drug was characterized on a plane by 2 principal component scores. The loading plot shows that 3 eluent mixts. are clustered into the same group providing similar information. For identification of unknowns, the method provided a drastic reduction of the range of possibilities to a few candidates.
ST TLC pharmaceutical principal component analysis; chromatog pharmaceutical principal component analysis
IT Chromatography, thin-layer
(in pharmaceutical anal., principal component anal. in)
IT Pharmaceutical analysis
(principal component anal. in, thin-layer chromatog. in)
IT 50-36-2 50-37-3 50-47-5 50-48-6 50-49-7 50-52-2 50-53-3, analysis 50-55-5 50-60-2 51-06-9 51-12-7 51-34-3 51-41-2 51-43-4 51-55-8, analysis 51-68-3 51-71-8 52-53-9 52-67-5

52-86-8 54-03-5 54-04-6 54-05-7 54-11-5 54-32-0 54-36-4
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58-08-2, analysis 58-14-0 58-25-3 58-32-2 58-37-7 58-38-8
58-39-9 58-40-2 58-46-8 58-55-9, preparation 58-73-1 58-74-2
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60-91-3 60-99-1 61-00-7 61-01-8 61-50-7 61-51-8 61-54-1
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298-46-4 298-57-7 299-42-3
RL: ANT (Analyte); ANST (Analytical study)
(chromatog. of, thin-layer, principal component anal. in)

IT 300-62-9 302-27-2 302-33-0 302-40-9 302-41-0 303-49-1 303-69-5
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RL: ANT (Analyte); ANST (Analytical study)
(chromatog. of, thin-layer, principal component anal. in)

IT 3819-00-9 3861-76-5 3930-20-9 4205-90-7 4378-36-3 4406-22-8
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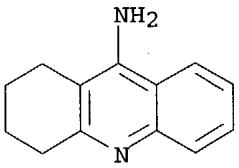
RL: ANT (Analyte); ANST (Analytical study)
(chromatog. of, thin-layer, principal component anal. in)

IT **321-64-2**
RL: ANT (Analyte); ANST (Analytical study)
(chromatog. of, thin-layer, principal component anal. in)

RN 321-64-2 HCAPLUS
CN 9-Acridinamine, 1,2,3,4-tetrahydro- (9CI) (CA INDEX NAME)



L113 ANSWER 13 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1984:551824 HCAPLUS
DN 101:151824
ED Entered STN: 27 Oct 1984
TI β-Carbolines and pharmaceutical preparations containing them
IN Huth, Andreas; Rahtz, Dieter; Seidelmann, Dieter; Schmiechen, Ralph; Biere, Helmut; Braestrup, Claus Thyco
PA Schering A.-G. , Fed. Rep. Ger.
SO Ger. Offen., 66 pp.
CODEN: GWXXBX
DT **Patent**
LA German

IC C07D471-04; A61K031-435
CC 28-2 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1
FAN.CNT 1

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PI	DE 3240514	A1	19840503	DE 1982-3240514	19821029 <--
	JP 59089678	A2	19840523	JP 1983-195407	19831020 <--
	JP 06033260	B4	19940502		
	FI 8303918	A	19840430	FI 1983-3918	19831026 <--
	EP 110814	A2	19840613	EP 1983-730103	19831027 <--
	EP 110814	A3	19850724		
	EP 110814	B1	19891213		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	DD 213217	A5	19840905	DD 1983-256042	19831027 <--
	AT 48602	E	19891215	AT 1983-730103	19831027 <--
	DK 8304956	A	19840430	DK 1983-4956	19831028 <--
	NO 8303942	A	19840430	NO 1983-3942	19831028 <--
	AU 8320694	A1	19840503	AU 1983-20694	19831028 <--
	AU 568513	B2	19880107		
	ZA 8308072	A	19840627	ZA 1983-8072	19831028 <--
	HU 32374	O	19840730	HU 1983-3711	19831028 <--
	HU 198208	B	19890828		
	ES 526896	A1	19840801	ES 1983-526896	19831028 <--
	CA 1260475	A1	19890926	CA 1983-439951	19831028 <--
	US 4731358	A	19880315	US 1986-902855	19860902 <--
PRAI	DE 1982-3240514		19821029 <--		
	EP 1983-730103		19831027 <--		
	US 1983-546357		19831028 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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OS CASREACT 101:151824
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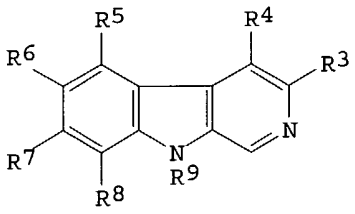


I

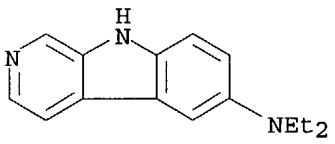
AB β-Carbolines I [R3 = H, halo, OR (R = H, C1-5 alkyl, cycloalkyl, aralkyl, aryl, heterocyclyl), NR1R2 (R1 = R but ≠ heterocyclyl; R2 = C1-3 acyl, C1-6 alkoxycarbonyl, CONH2; NR1R2 = 5- or 6-membered heterocyclyl), SOnR (n = 0-2), PO3R10R11 (R10, R11 = R but ≠ heterocyclyl), (un)substituted C1-5 alkyl, R10 = cycloalkyl, aralkyl, aralkenyl, aryl; R4 = H, C1-5 alkyl, alkoxyalkyl, COR12 (R12 = H, C1-5 alkyl, cycloalkyl, aralkyl, OH, alkoxy, cycloalkoxy, aralkoxy, NR12, CSR13 (R13 = H, C1-5 alkyl, cycloalkyl, aralkyl); R5-R8 = H, halo, NO2, OR, NR1R2, PO3R10R11, SO2NRR11, CO2R, CONR1R2, CSNR1R2, COR; R9 = H, C1-5 alkyl, C1-3 acyl, CONH2, C1-6 alkoxycarbonyl, SO2R14 (R14 = Me, p-tolyl)], useful in controlling aggressive behavior (no data), were prepared by 9 methods. Refluxing indole with Me2NCH:C(N:CHNMe2)CO2Et in AcOH 6 h gave I (R3 = CO2Et, R4-R9 = H), LiAlH4 reduction of which gave I (R3 = CH2OH, R4-R9 =

H).
ST aggression inhibitor beta carboline prepn
IT Behavior
(aggressive, β-carboline derivs. effect on)
IT 82596-91-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(Grignard reaction of)
IT 74-96-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(Grignard reaction of, with carbolinecarboxylate)
IT 74214-63-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(azidation of, and reaction with tert-Bu alc.)
IT 50614-86-3
RL: PROC (Process)
(conversion of, to nitrovinyl derivative)
IT 91985-39-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclization of)
IT 20289-26-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclization of, with (aminoethenyl)phosphonate derivative)
IT 298-12-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclization of, with (aminoethyl)indolecarboxylates)
IT 120-72-9, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclization of, with amino acrylate derivative)
IT 74119-32-7 74119-37-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclization of, with indole)
IT 91985-70-5 91985-72-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(decarboxylation of)
IT 91943-73-6 91943-94-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(dehydrogenation of)
IT 91943-95-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(intermediate for preparation of carbolinecarboxylate derivative)
IT 91943-85-0P 91943-90-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and cyclization of, with glyoxylic acid)
IT 91164-55-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and cyclization of, with indole)
IT 91943-83-8P 91943-86-1P 91943-92-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and dehydrogenation and decarboxylation of)
IT 91943-84-9P 91943-89-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrogenation of)
IT 74214-62-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and lithium aluminum hydride reduction of, or Grignard reaction with bromoethane)
IT 73834-75-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(preparation and methanolysis of)
IT 91943-59-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and nitration or chlorosulfonylation of)
IT 91985-40-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with dihydropyran)
IT 91985-58-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with benzaldehyde)
IT 65474-79-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reactions of)
IT 91985-48-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and tosylation of)
IT 91985-44-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and N-acetylation of)
IT 82596-92-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation as anti-aggression agent and reaction with thionyl chloride)
IT 91943-55-4P 91943-56-5P 91943-57-6P 91943-58-7P 91943-63-4P
91943-64-5P **91943-65-6P** 91943-68-9P 91943-69-0P
91943-70-3P 91943-71-4P 91943-75-8P 91943-78-1P 91943-79-2P
91943-80-5P **91943-82-7P** 91943-87-2P 91943-91-8P
91943-93-0P 91943-96-3P 91943-98-5P 91943-99-6P
91944-00-2P 91944-01-3P 91944-02-4P **91944-03-5P**
91944-04-6P 91944-05-7P 91944-06-8P 91985-41-0P
91985-42-1P 91985-43-2P 91985-45-4P 91985-46-5P 91985-47-6P
91985-49-8P 91985-50-1P 91985-51-2P 91985-52-3P 91985-53-4P
91985-55-6P 91985-56-7P 91985-57-8P 91985-59-0P 91985-61-4P
91985-62-5P 91985-63-6P **91985-68-1P** 91985-69-2P
91985-71-6P 91985-73-8P 91985-74-9P 91985-75-0P
91985-76-1P 91985-77-2P 91985-78-3P 91985-79-4P 91985-80-7P
91985-81-8P 91985-82-9P 91985-83-0P 91985-84-1P 91985-85-2P
91985-86-3P 91985-87-4P 91985-88-5P 91985-89-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anti-aggression agent)
IT 91943-66-7P 91943-67-8P **91985-67-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anti-aggression agent and amidation of)
IT 91985-64-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anti-aggression agent and carbonylation of)
IT 91985-66-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anti-aggression agent and desulfurization of)
IT 91943-61-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anti-aggression agent and hydrogenation and desulfurization of)
IT 91943-74-7P 91943-76-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anti-aggression agent and hydrogenation of)
IT 18203-06-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anti-aggression agent and methanolysis of)
IT 91985-60-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anti-aggression agent and oxidation and iodination of)
IT 91943-97-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anti-aggression agent and reaction with oxalyl chloride)
IT 91943-72-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anti-aggression agent and reactions of)
IT 91985-54-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anti-aggression agent and substitution reactions of)
IT 91985-65-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anti-aggression agent and transesterification of)
IT **6453-27-6P** 91943-77-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anti-aggression agent and N-allylation of)
IT 91943-62-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anti-aggression agent and N-allylation or desulfurization of)
IT 5815-08-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with (aminomethyl)phosphonate)
IT 603-35-0, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with (chloromethyl)-β-carboline)
IT 103-71-9, reactions 624-83-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with (hydroxymethyl)-β-carboline)
IT 111-24-0 696-59-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with aminocarboline)
IT 50614-84-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with aminonitroethene derivative)
IT 26386-88-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with carbolinecarboxylic acid and tert-Bu alc.)
IT 75-65-0, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with carbolinecarboxylic acid azide)
IT 79-37-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with carbolinephosphonate ester)
IT **91943-60-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with di-Me disulfide and isoamyl nitrite)
IT 1190-92-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with indolecarboxylate)
IT 100-51-6, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with iodo-β-carboline and carbon monoxide)
IT 50917-72-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with methanediamine derivative)
IT 4637-24-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with methylcarboline)

IT 91943-81-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with methyllithium)
IT 91943-88-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with nitromethane)
IT 100-52-7, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with phosphorane derivative)
IT 74-93-1, reactions 122-52-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with sodium hydride and (chloromethyl)-β-carboline)
IT 73834-77-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactions of)
IT 106-95-6, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(N-allylation by, of aminocarboline derivs.)
IT **91943-64-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anti-aggression agent)
RN 91943-64-5 HCAPLUS
CN 9H-Pyrido[3,4-b]indol-6-amine, N,N-diethyl- (9CI) (CA INDEX NAME)



L113 ANSWER 14 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1980:645453 HCAPLUS
DN 93:245453
ED Entered STN: 12 May 1984
TI Antiulcer agents
PA Teijin Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
IC A61K031-135; A61K031-44
CC 63-6 (**Pharmaceuticals**)
Section cross-reference(s): 7
FAN.CNT 1

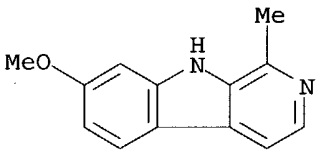
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 55055116	A2	19800422	JP 1978-127303	19781018 <--
PRAI JP 1978-127303		19781018 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 55055116	IC	A61K031-135IC A61K031-44

AB Antiulcer agents contain monoamine oxidase inhibitors PhZNH2 (Z = C1-6 divalent radicals). Thus, a formulation of tranylcyproamine (I) [155-09-9] 500, CM-cellulose Ca 500, and silicic anhydride 5 g was made into 10,000 tablets. The s.c. administration of I at 1 mg/kg in mice for indomethacin-induced ulcer showed 3.3 ± 2.0 mm ulcer coefficient vs. 14.8 ± 6.7 mm of a control. Similarly tested were phenethylamine [64-04-0], pargyline [555-57-7], harmine [**442-51-3**], and iproniazid [54-92-2].

ST antiulcer monoamine oxidase inhibitor; phenylalkylamine antiulcer
IT Ulcer
(inhibitors, phenylalkylamines)
IT 54-92-2 64-04-0 **442-51-3** 555-57-7
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(antiulcer activity of)
IT 155-09-9
RL: BIOL (Biological study)
(antiulcer activity of and pharmaceuticals containing)
IT 9001-66-5
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors, phenylalkylamines as, antiulcer activity of)
IT **442-51-3**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(antiulcer activity of)
RN 442-51-3 HCAPLUS
CN 9H-Pyrido[3,4-b]indole, 7-methoxy-1-methyl- (8CI, 9CI) (CA INDEX NAME)



L113 ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1971:136 HCAPLUS
DN 74:136
ED Entered STN: 12 May 1984
TI Effects of aminoacridines and related compounds on the conformation of rat-liver ribosomes
AU Hultin, Tore
CS Dep. Cell Physiol., Wenner-Gren Inst., Stockholm, Swed.
SO Chemico-Biological Interactions (**1970**), 2(2), 61-77
CODEN: CBINA8; ISSN: 0009-2797
DT Journal
LA English
CC 2 (General Biochemistry)
AB A temperature-dependent, conformational reaction was induced in rat liver ribosomes by aminoacridines and a number of other pos. charged, planar, heterocyclic compds. with established or presumptive intercalating activity. The reaction involved a specific alteration in the pattern of structural shielding of the ribosomal proteins. Most strikingly, a previously resistant protein (protein 10) in the larger subunit became accessible to mol. probes (chymotrypsin, thermolysin, procion blue). The unmasking could be semiquant. assayed by disc electrophoresis. The usefulness of this system for analyzing the intercalating activity of compds. without visible absorption is illustrated by expts. with harmine. The concentration-temperature curve for the conformational reaction showed a marked inflection at 25° (expts. with Atebrine). The corresponding concentration (0.8mM) may be just sufficient for effective saturation of available, intercalative binding sites. The data suggest that the activation energy of the conformational reaction was progressively reduced by the intercalating agents up to this saturation limit. The selective unmasking of protein 10 was enhanced by increased ionic strength. At KCl concns. above

0.7M intercalating agents were no longer needed for unmasking at 35°. Bivalent cations above a certain level had a fairly moderate influence on the reaction. The selective unmasking was basically reversible. In practice, reversibility was limited by the different strength of binding of the active compds. to the ribosomes. With phenazonium dyes reversibility was readily achieved after reduction The inhibition of the amino acid incorporating activity was reversed under comparable conditions. At high concns. (3-5mM) the conformational reaction lost much of its selectivity. At the same time the difference between planar and nonplanar compds. became less striking. The expts. suggest that the selective unmasking was related to an intercalative deformation of RNA helices, while the unspecific reaction was due to a more general interference of pos. charged aromatic compds. with the tertiary RNA structure.

ST aminoacridines ribosomes proteins; ribosomes proteins aminoacridines; proteins ribosomes aminoacridines

IT Ribosomes
(conformation of, aminoacridine derivs. effect on)

IT Methyl green
RL: BIOL (Biological study)
(ribosome conformation changes in presence of)

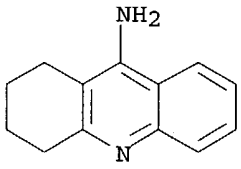
IT Acridine, amino-, derivs.
RL: PROC (Process)
(ribosome conformational changes in presence of)

IT 54-05-7 61-73-4 81-93-6 83-89-6 90-45-9 92-32-0 92-62-6 135-49-9 304-21-2 **321-64-2** **442-51-3** 486-84-0 **487-03-6** 525-57-5 531-53-3 537-65-5 635-76-7 1239-45-8 1684-42-0 4712-70-3 6257-64-3 6402-13-7 6586-04-5 8048-52-0 10127-02-3 18472-89-4 22906-83-8 24910-38-1 30612-30-7 30612-32-9 30612-34-1
RL: BIOL (Biological study)
(ribosome conformation changes in presence of)

IT **321-64-2**
RL: BIOL (Biological study)
(ribosome conformation changes in presence of)

RN 321-64-2 HCAPLUS

CN 9-Acridinamine, 1,2,3,4-tetrahydro- (9CI) (CA INDEX NAME)



L113 ANSWER 16 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1964:491854 HCAPLUS

DN 61:91854

OREF 61:15942b

ED Entered STN: 22 Apr 2001

TI Analgesics containing harmine

PA Youngs Rubber Corp.

SO 2 pp.

DT **Patent**

LA Unavailable

IC A61K

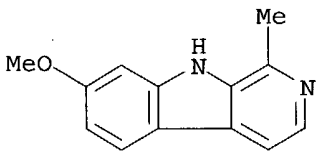
CC 30 (**Pharmaceuticals**)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 970894		19640923	GB	<--

PRAI US 19611025 <--
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
GB 970894	IC	A61K

AB A mixture having analgesic properties when administered orally consists of harmine (I) and the dry product obtained by extracting red cinchona bark with 80% EtOH. I may contain up to 10% of 3,4-dihydroharmine or tetrahydrodramine. A suitable dose is 4-40 mg. I and 120 mg. cinchona extract
IT Cinchona
(extract of, analgesic containing)
IT Analgesics
(harmine-containing)
IT 304-21-2, Harmaline **442-51-3**, Harmine 17019-01-1, Harmine, tetrahydro-
(analgesic containing)
IT **442-51-3**, Harmine
(analgesic containing)
RN 442-51-3 HCAPLUS
CN 9H-Pyrido[3,4-b]indole, 7-methoxy-1-methyl- (8CI, 9CI) (CA INDEX NAME)



L113 ANSWER 17 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1964:454352 HCAPLUS
DN 61:54352
OREF 61:9365h,9366a
ED Entered STN: 22 Apr 2001
TI Isolation of harmine
PA Pakistan Council of Scientific and Industrial Research
SO 5 pp.
DT **Patent**
LA Unavailable
IC C07D
CC 30 (**Pharmaceuticals**)

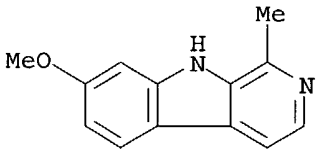
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 964690		19640722	GB	<--
PRAI PK		19620619 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
GB 964690	IC	C07D

AB Powdered Peganum harmala seeds (8 kg.) were percolated 8 times with EtOH at room temperature The solvent was removed in vacuo at <40°. The residue was partitioned between petr. ether and H2O. The H2O layer was freed of organic solvent in vacuo, the pH was adjusted to 6.5 with NH4OH, and (NH4)2SO4 added. The reddish solution was treated with charcoal and filtered. Addition of KI to the filtrate followed by treating with charcoal gave 490 g. hydrogen iodides. (The charcoal mud was extracted with hot. dilute EtOH containing a little AcOH). The salts were treated with 10% NH4OH to give 65 g. harmine, m. 266°, the HCl salt m. 285° and tetrahydroharmine m. 199°.
IT Peganum harmala

(harmine manufacture from)
IT Harmidine, hexachloroplatinate(IV)
Harmidine, hydriodide
Harmidine, dibromo-
Harmidine, dihydro-
Harmidol, hexachloroplatinate(IV)
Harmidol, hydrochloride
Harmidol, picrate(1:1)
IT 304-21-2, Harmidine **442-51-3**, Harmine
(manufacture from Peganum harmala)
IT **343-27-1**, Harmine, hydrochloride 363-11-1, Harmidine, hydrochloride 525-57-5, Harmidol 17019-01-1, Harmine, tetrahydro- 95534-45-5, Harmidine, bromo- 98863-21-9, Harmidine, picrate
(preparation of)
IT **442-51-3**, Harmine
(manufacture from Peganum harmala)
RN 442-51-3 HCAPLUS
CN 9H-Pyrido[3,4-b]indole, 7-methoxy-1-methyl- (8CI, 9CI) (CA INDEX NAME)



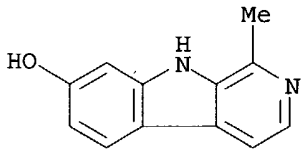
L113 ANSWER 18 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1933:48442 HCAPLUS
DN 27:48442
OREF 27:4348f
ED Entered STN: 16 Dec 2001
TI Alkaloids
IN Pyman, Frank L.; Levene, Hyman H. L.
PA Boot's Pure Drug Co. Ltd.
DT **Patent**
LA Unavailable
CC 17 (**Pharmaceutical** Chemistry)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 382124		19321020	GB	<--

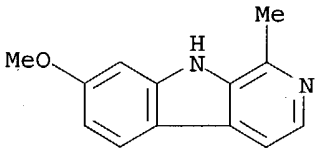
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
GB 382124		

AB Harmol is produced from harmine by demethylation with 45-70% H_2SO_4, and harmalol from harmaline with 40-55% H_2SO_4, at an elevated temperature not exceeding 155°.
IT **487-03-6**, Harmol 525-57-5, Harmalol
(manufacture of)
IT **487-03-6**, Harmol
(manufacture of)
RN 487-03-6 HCAPLUS
CN 9H-Pyrido[3,4-b]indol-7-ol, 1-methyl- (8CI, 9CI) (CA INDEX NAME)



L113 ANSWER 19 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1933:47861 HCAPLUS
DN 27:47861
OREF 27:4300g-h
ED Entered STN: 16 Dec 2001
TI The carotid sinus and the production of bradycardia by Cecropia adenopus, quinidine or harmine
AU Sivori, Pedro N.
SO Rev. centro estud. farm. bioquim. (**1933**), 22, 267-81
DT Journal
LA Unavailable
CC 11H (Biological Chemistry: **Pharmacology**)
AB Expts. on dogs are described. The bradycardia produced by extract of Cecropia adenopus or quinidine sulfate or harmine-HCl is independent of the vagus or the reflex action of the carotid sinus.
IT Carotid sinus
(bradycardia production and)
IT Cecropia adenopus
(bradycardia production by)
IT **Bradycardia**
(production by Cecropia adenopus, quinidine or harmine)
IT 56-54-2, Quinidine **442-51-3**, Harmine
(bradycardia production by)
IT **442-51-3**, Harmine
(bradycardia production by)
RN 442-51-3 HCAPLUS
CN 9H-Pyrido[3,4-b]indole, 7-methoxy-1-methyl- (8CI, 9CI) (CA INDEX NAME)

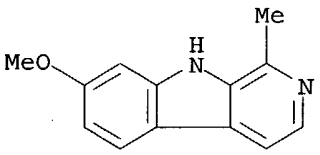


L113 ANSWER 20 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1931:4731 HCAPLUS
DN 25:4731
OREF 25:560c-d
ED Entered STN: 16 Dec 2001
TI Purifying harmine
IN Merck, E.
PA Chem. Fab.
DT **Patent**
LA Unavailable
CC 17 (**Pharmaceutical** Chemistry)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 507420		19280601	DE	<--

CLASS
PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

DE 507420
AB The crude alkaloid is treated in acid solution at about 0° with a small quantity of KMnO4.
IT **442-51-3**, Harmine
(purification of)
IT **442-51-3**, Harmine
(purification of)
RN 442-51-3 HCAPLUS
CN 9H-Pyrido[3,4-b]indole, 7-methoxy-1-methyl- (8CI, 9CI) (CA INDEX NAME)



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E206 THROUGH E246 ASSIGNED

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FILE 'REGISTRY' ENTERED AT 09:00:37 ON 17 NOV 2004
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 15 NOV 2004 HIGHEST RN 781585-71-5
DICTIONARY FILE UPDATES: 15 NOV 2004 HIGHEST RN 781585-71-5

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

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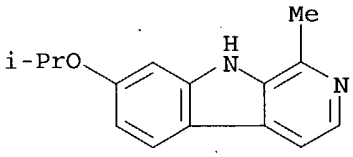
L121 ANSWER 1 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **186790-81-8** REGISTRY
CN 9H-Pyrido[3,4-b]indole, 1-methyl-7-(1-methylethoxy)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C15 H16 N2 O
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES

(Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

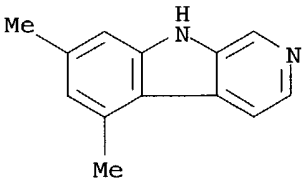
REFERENCE 1: 135:189741

REFERENCE 2: 132:146150

REFERENCE 3: 131:199871

REFERENCE 4: 126:152816

L121 ANSWER 2 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **177279-01-5** REGISTRY
CN 9H-Pyrido[3,4-b]indole, 5,7-dimethyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H12 N2
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)



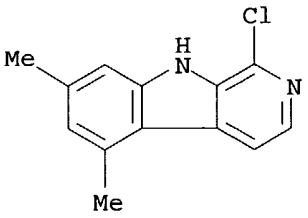
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 125:58487

L121 ANSWER 3 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **177279-00-4** REGISTRY
CN 9H-Pyrido[3,4-b]indole, 1-chloro-5,7-dimethyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H11 Cl N2
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

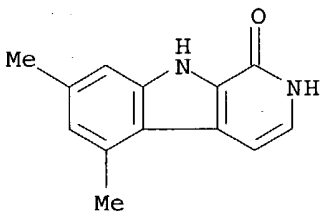


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 125:58487

L121 ANSWER 4 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **177278-98-7** REGISTRY
CN 1H-Pyrido[3,4-b]indol-1-one, 2,9-dihydro-5,7-dimethyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H12 N2 O
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

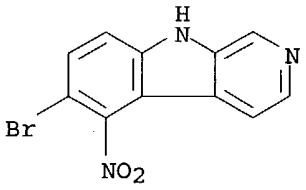


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 125:58487

L121 ANSWER 5 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **160065-90-7** REGISTRY
CN 9H-Pyrido[3,4-b]indole, 6-bromo-5-nitro- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C11 H6 Br N3 O2
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation)



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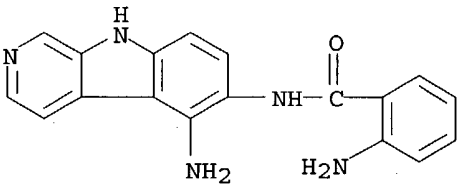
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:357315

REFERENCE 2: 122:51116

L121 ANSWER 6 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **157610-88-3** REGISTRY
CN Benzamide, 2-amino-N-(5-amino-9H-pyrido[3,4-b]indol-6-yl)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 9H-Pyrido[3,4-b]indole, benzamide deriv.
OTHER NAMES:
CN 6-[(2-Aminobenzoyl)amino]-5-amino-9H-pyrido[3,4-b]indole
FS 3D CONCORD
MF C18 H15 N5 O
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)



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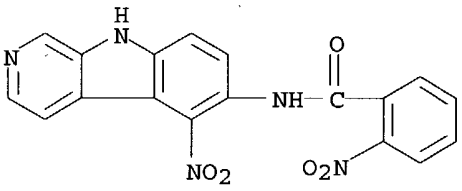
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:270863

REFERENCE 2: 121:169758

L121 ANSWER 7 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **157610-86-1** REGISTRY
CN Benzamide, 2-nitro-N-(5-nitro-9H-pyrido[3,4-b]indol-6-yl)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 9H-Pyrido[3,4-b]indole, benzamide deriv.
OTHER NAMES:

CN 6-[(2-Nitrobenzoyl)amino]-5-nitro-9H-pyrido[3,4-b]indole
FS 3D CONCORD
MF C18 H11 N5 O5
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)



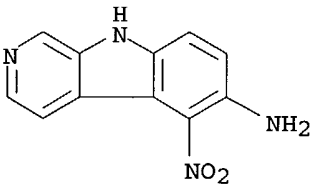
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:270863

REFERENCE 2: 121:169758

L121 ANSWER 8 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **131203-79-7** REGISTRY
CN 9H-Pyrido[3,4-b]indol-6-amine, 5-nitro- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 6-Amino-5-nitro-9H-pyrido[3,4-b]indole
MF C11 H8 N4 O2
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: RACT (Reactant or reagent)
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)



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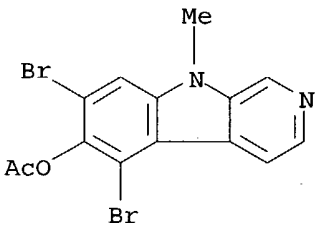
3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:270863

REFERENCE 2: 121:169758

REFERENCE 3: 114:23869

L121 ANSWER 9 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **124900-27-2** REGISTRY
CN 9H-Pyrido[3,4-b]indol-6-ol, 5,7-dibromo-9-methyl-, acetate (ester) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 5,7-Dibromo-6-acetoxy-9-methylpyrido[3,4-b]indole
FS 3D CONCORD
MF C14 H10 Br2 N2 O2
CI COM
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study)



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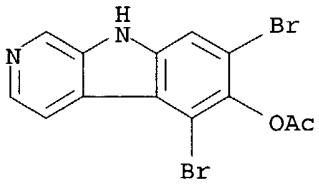
3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 139:143967

REFERENCE 2: 128:213340

REFERENCE 3: 112:55601

L121 ANSWER 10 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **123363-41-7** REGISTRY
CN 9H-Pyrido[3,4-b]indol-6-ol, 5,7-dibromo-, acetate (ester) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 5,7-Dibromo-6-acetoxypyrido[3,4-b]indole
CN 6-O-Acetyl-7-bromoeudistomine D
FS 3D CONCORD
MF C13 H8 Br2 N2 O2
CI COM
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

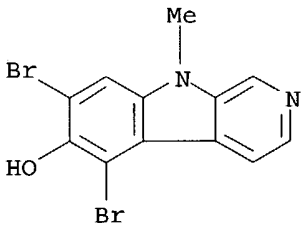
REFERENCE 1: 139:143967

REFERENCE 2: 119:174113

REFERENCE 3: 112:55601

REFERENCE 4: 111:186918

L121 ANSWER 11 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **123363-40-6** REGISTRY
CN 9H-Pyrido[3,4-b]indol-6-ol, 5,7-dibromo-9-methyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 5,7-Dibromo-6-hydroxy-9-methylpyrido[3,4-b]indole
CN 9-Methyl-7-bromoeudistomine D
FS 3D CONCORD
MF C12 H8 Br2 N2 O
CI COM
SR CA
LC STN Files: CA, CAPLUS, MEDLINE, TOXCENTER, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

18 REFERENCES IN FILE CA (1907 TO DATE)
18 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 139:143967

REFERENCE 2: 136:241690

REFERENCE 3: 135:31833

REFERENCE 4: 133:147916

REFERENCE 5: 130:20380

REFERENCE 6: 129:36346

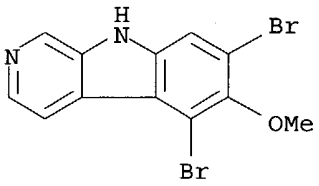
REFERENCE 7: 123:329954

REFERENCE 8: 122:230125

REFERENCE 9: 122:23571

REFERENCE 10: 121:277563

L121 ANSWER 12 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **113960-66-0** REGISTRY
CN 9H-Pyrido[3,4-b]indole, 5,7-dibromo-6-methoxy- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 5,7-Dibromo-6-methoxypyrido[3,4-b]indole
FS 3D CONCORD
MF C12 H8 Br2 N2 O
SR CA
LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPAT2, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: PREP (Preparation)



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5 REFERENCES IN FILE CA (1907 TO DATE)
5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 137:6093

REFERENCE 2: 135:242149

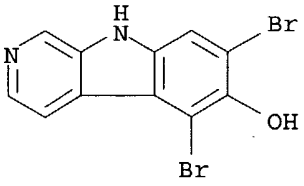
REFERENCE 3: 112:55601

REFERENCE 4: 110:212805

REFERENCE 5: 108:160949

L121 ANSWER 13 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **101927-49-5** REGISTRY
CN 9H-Pyrido[3,4-b]indol-6-ol, 5,7-dibromo- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 5,7-Dibromo-6-hydroxypyrido[3,4-b]indole
CN 7-Bromoeudistomin D
CN 7-Bromoeudistomine D
FS 3D CONCORD

MF C11 H6 Br2 N2 O
CI COM
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, DDFU, DRUGU, MEDLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent)



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12 REFERENCES IN FILE CA (1907 TO DATE)
12 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:282468

REFERENCE 2: 139:143967

REFERENCE 3: 133:147916

REFERENCE 4: 122:230125

REFERENCE 5: 119:174113

REFERENCE 6: 112:55601

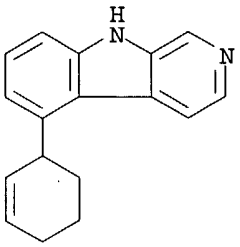
REFERENCE 7: 111:186918

REFERENCE 8: 110:212805

REFERENCE 9: 108:160949

REFERENCE 10: 107:4667

L121 ANSWER 14 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **97820-22-9** REGISTRY
CN 9H-Pyrido[3,4-b]indole, 5-(2-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C17 H16 N2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

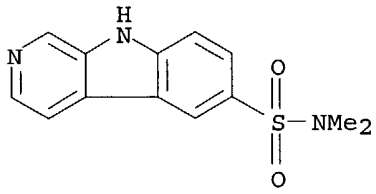


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 103:87857

L121 ANSWER 15 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **91985-71-6** REGISTRY
CN 9H-Pyrido[3,4-b]indole-6-sulfonamide, N,N-dimethyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H13 N3 O2 S
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation)



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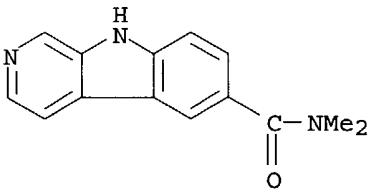
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 101:151824

L121 ANSWER 16 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **91985-68-1** REGISTRY
CN 9H-Pyrido[3,4-b]indole-6-carboxamide, N,N-dimethyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C14 H13 N3 O
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation)

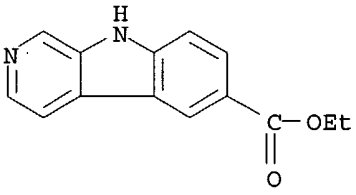


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 101:151824

L121 ANSWER 17 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **91985-67-0** REGISTRY
CN 9H-Pyrido[3,4-b]indole-6-carboxylic acid, ethyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C14 H12 N2 O2
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation)

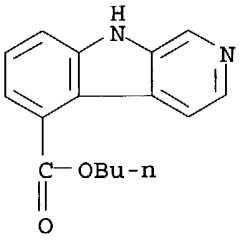


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 101:151824

L121 ANSWER 18 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **91944-04-6** REGISTRY
CN 9H-Pyrido[3,4-b]indole-5-carboxylic acid, butyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C16 H16 N2 O2
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation)

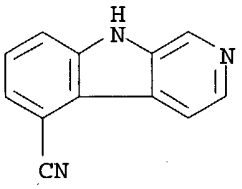


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 101:151824

L121 ANSWER 19 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **91944-03-5** REGISTRY
CN 9H-Pyrido[3,4-b]indole-5-carbonitrile (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C12 H7 N3
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation)

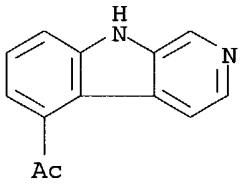


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 101:151824

L121 ANSWER 20 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **91943-93-0** REGISTRY
CN Ethanone, 1-(9H-pyrido[3,4-b]indol-5-yl)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 9H-Pyrido[3,4-b]indole, ethanone deriv.
FS 3D CONCORD
MF C13 H10 N2 O
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation)

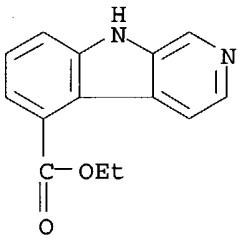


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 101:151824

L121 ANSWER 21 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **91943-82-7** REGISTRY
CN 9H-Pyrido[3,4-b]indole-5-carboxylic acid, ethyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C14 H12 N2 O2
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation)

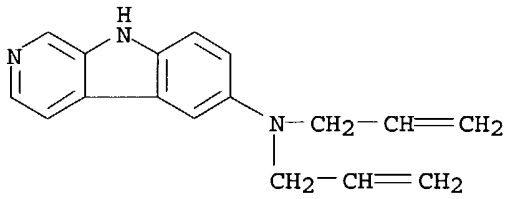


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 101:151824

L121 ANSWER 22 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **91943-65-6** REGISTRY
CN 9H-Pyrido[3,4-b]indol-6-amine, N,N-di-2-propenyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C17 H17 N3
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation)

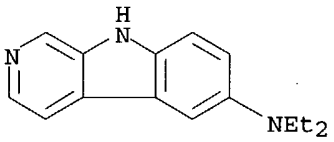


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 101:151824

L121 ANSWER 23 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **91943-64-5** REGISTRY
CN 9H-Pyrido[3,4-b]indol-6-amine, N,N-diethyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C15 H17 N3
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation)

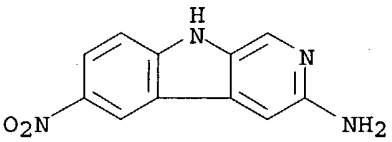


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 101:151824

L121 ANSWER 24 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **91943-60-1** REGISTRY
CN 9H-Pyrido[3,4-b]indol-3-amine, 6-nitro- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C11 H8 N4 O2
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: RACT (Reactant or reagent)

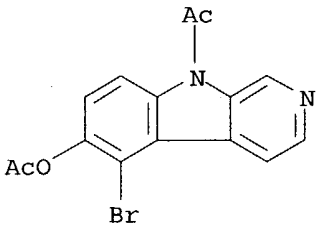


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 101:151824

L121 ANSWER 25 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **88729-60-6** REGISTRY
CN 9H-Pyrido[3,4-b]indol-6-ol, 9-acetyl-5-bromo-, acetate (ester) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Eudistomin D diacetate
CN Eudistomine D diacetate
CN N,O-Diacetyleudistomin D
FS 3D CONCORD
MF C15 H11 Br N2 O3
LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation)
RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

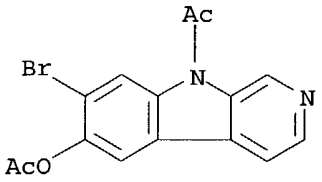
3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:4667

REFERENCE 2: 102:226023

REFERENCE 3: 100:100240

L121 ANSWER 26 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **88704-41-0** REGISTRY
CN 9H-Pyrido[3,4-b]indol-6-ol, 9-acetyl-7-bromo-, acetate (ester) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Eudistomin J diacetate
CN Eudistomine J diacetate
CN N,O-Diacetyleudistomin J
FS 3D CONCORD
MF C15 H11 Br N2 O3
LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation)
RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

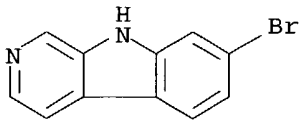
3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:4667

REFERENCE 2: 102:226023

REFERENCE 3: 100:100240

L121 ANSWER 27 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **88704-40-9** REGISTRY
CN 9H-Pyrido[3,4-b]indole, 7-bromo- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 7-Bromonorharman
CN Eudistomin O
CN Eudistomine O
FS 3D CONCORD
MF C11 H7 Br N2
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT, DDFU, DRUGU, MEDLINE, NAPRALERT, SPECINFO, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study)
RL.NP Roles from non-patents: BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent)
RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological study); PREP (Preparation)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

11 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
11 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 130:267605

REFERENCE 2: 123:223207

REFERENCE 3: 122:51116

REFERENCE 4: 111:171360

REFERENCE 5: 109:186415

REFERENCE 6: 109:3137

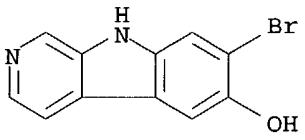
REFERENCE 7: 108:160949

REFERENCE 8: 107:4667

REFERENCE 9: 106:113165

REFERENCE 10: 102:226023

L121 ANSWER 28 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **88704-38-5** REGISTRY
CN 9H-Pyrido[3,4-b]indol-6-ol, 7-bromo- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Eudistomin J
CN Eudistomine J
FS 3D CONCORD
MF C11 H7 Br N2 O
LC STN Files: BEILSTEIN*, CA, CAPLUS, DDFU, DRUGU, NAPRALERT, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study)
RL.NP Roles from non-patents: BIOL (Biological study); OCCU (Occurrence)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6 REFERENCES IN FILE CA (1907 TO DATE)
6 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:34950

REFERENCE 2: 107:4667

REFERENCE 3: 106:113165

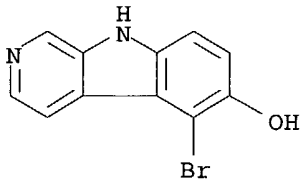
REFERENCE 4: 104:184073

REFERENCE 5: 102:226023

REFERENCE 6: 100:100240

L121 ANSWER 29 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **88704-37-4** REGISTRY
CN 9H-Pyrido[3,4-b]indol-6-ol, 5-bromo- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Eudistomin D
CN Eudistomine D
FS 3D CONCORD
MF C11 H7 Br N2 O
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT, CSCHEM, DDFU,

DRUGU, NAPRALERT, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study)
RL.NP Roles from non-patents: BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PRP (Properties)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9 REFERENCES IN FILE CA (1907 TO DATE)
9 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:34950

REFERENCE 2: 123:286364

REFERENCE 3: 114:203845

REFERENCE 4: 108:160949

REFERENCE 5: 107:4667

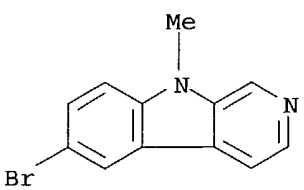
REFERENCE 6: 106:113165

REFERENCE 7: 104:184073

REFERENCE 8: 102:226023

REFERENCE 9: 100:100240

L121 ANSWER 30 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **59444-70-1** REGISTRY
CN 9H-Pyrido[3,4-b]indole, 6-bromo-9-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C12 H9 Br N2
LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties); RACT (Reactant or reagent)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE)
5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 137:6093

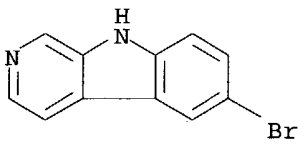
REFERENCE 2: 135:242149

REFERENCE 3: 125:167688

REFERENCE 4: 122:290515

REFERENCE 5: 85:5927

L121 ANSWER 31 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **59444-69-8** REGISTRY
CN 9H-Pyrido[3,4-b]indole, 6-bromo- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 6-Bromonorharman
CN Eudistomin N
CN Eudistomine N
FS 3D CONCORD
MF C11 H7 Br N2
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, DDFU, DRUGU, MEDLINE, NAPRALERT, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological study); PREP (Preparation)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

19 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
19 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:357315

REFERENCE 2: 139:207080

REFERENCE 3: 137:6093

REFERENCE 4: 136:85970

REFERENCE 5: 135:242149

REFERENCE 6: 125:167688

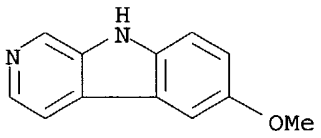
REFERENCE 7: 123:340089

REFERENCE 8: 122:239570

REFERENCE 9: 122:51116

REFERENCE 10: 117:233779

L121 ANSWER 32 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **30684-42-5** REGISTRY
CN 9H-Pyrido[3,4-b]indole, 6-methoxy- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 6-Methoxy-β-carboline
CN 6-Methoxynorharman
CN 6-Methoxynorharmane
CN 6-Methoxypyrido[3,4-b]indole
FS 3D CONCORD
MF C12 H10 N2 O
CI COM
LC STN Files: BEILSTEIN*, BIOBUSINESS, CA, CAPLUS, CASREACT, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

21 REFERENCES IN FILE CA (1907 TO DATE)
21 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:417220

REFERENCE 2: 139:207080

REFERENCE 3: 137:6093

REFERENCE 4: 135:242149

REFERENCE 5: 123:340089

REFERENCE 6: 122:239570

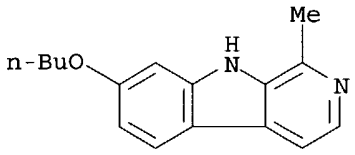
REFERENCE 7: 121:26757

REFERENCE 8: 116:58390

REFERENCE 9: 112:55601

REFERENCE 10: 111:186918

L121 ANSWER 33 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **15467-58-0** REGISTRY
CN 9H-Pyrido[3,4-b]indole, 7-butoxy-1-methyl- (8CI, 9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C16 H18 N2 O
CI COM
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

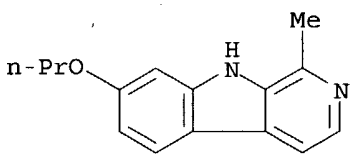
3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 137:241667

REFERENCE 2: 126:152816

REFERENCE 3: 66:74683

L121 ANSWER 34 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **10593-57-4** REGISTRY
CN 9H-Pyrido[3,4-b]indole, 1-methyl-7-propoxy- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN Ro 3-1697
FS 3D CONCORD
MF C15 H16 N2 O
LC STN Files: BEILSTEIN*, CA, CAPLUS, RTECS*, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study)

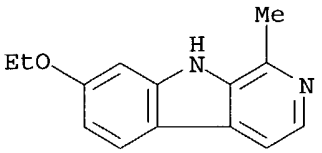


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 126:152816

L121 ANSWER 35 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **10593-56-3** REGISTRY
CN 9H-Pyrido[3,4-b]indole, 7-ethoxy-1-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C14 H14 N2 O
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); USES (Uses); NORL (No role in record)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1907 TO DATE)
7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 137:241667

REFERENCE 2: 137:6093

REFERENCE 3: 135:242149

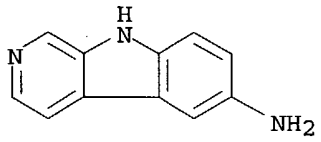
REFERENCE 4: 135:189741

REFERENCE 5: 132:146150

REFERENCE 6: 126:152816

REFERENCE 7: 41:15792

L121 ANSWER 36 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **6453-27-6** REGISTRY
CN 9H-Pyrido[3,4-b]indol-6-amine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 9H-Pyrido[3,4-b]indole, 6-amino- (6CI, 7CI, 8CI)
OTHER NAMES:
CN 6-Amino-β-carboline
FS 3D CONCORD
MF C11 H9 N3
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMINFORMRX, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); NORL (No role in record)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

18 REFERENCES IN FILE CA (1907 TO DATE)
18 REFERENCES IN FILE CAPLUS (1907 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:417220

REFERENCE 2: 140:235697

REFERENCE 3: 122:51116

REFERENCE 4: 116:58390

REFERENCE 5: 114:81654

REFERENCE 6: 114:23869

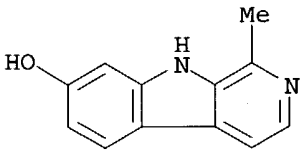
REFERENCE 7: 114:23823

REFERENCE 8: 112:216738

REFERENCE 9: 109:22905

REFERENCE 10: 106:196295

L121 ANSWER 37 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **487-03-6** REGISTRY
CN 9H-Pyrido[3,4-b]indol-7-ol, 1-methyl- (8CI, 9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Harmol (6CI, 7CI)
OTHER NAMES:
CN NSC 72292
FS 3D CONCORD
DR 50674-97-0
MF C12 H10 N2 O
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, DDFU, DRUGU, EMBASE, MEDLINE, NAPRALERT, NIOSHTIC, SPECINFO, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Conference; Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological study)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

259 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
259 REFERENCES IN FILE CAPLUS (1907 TO DATE)
12 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:332347

REFERENCE 2: 141:135336

REFERENCE 3: 140:399356

REFERENCE 4: 139:334952

REFERENCE 5: 139:277043

REFERENCE 6: 139:131123

REFERENCE 7: 139:127367

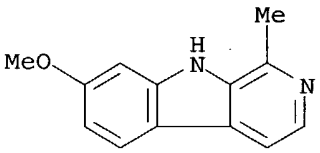
REFERENCE 8: 139:122880

REFERENCE 9: 139:113846

REFERENCE 10: 138:313811

L121 ANSWER 38 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **442-51-3** REGISTRY
CN 9H-Pyrido[3,4-b]indole, 7-methoxy-1-methyl- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1-Methyl-7-methoxy-β-carboline
CN 7-Methoxy-1-methyl-9H-pyrido[3,4-b]indole
CN Banisterin
CN Banisterine
CN Harmin
CN Harmine
CN Leucoharmine
CN Telepathin
CN Telepathine
CN Yagein
CN Yageine
FS 3D CONCORD
MF C13 H12 N2 O
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, DDFU, DETHERM*, DRUGU, EMBASE, HODOC*, IPA, MEDLINE, MRCK*, NAPRALERT, NIOSHTIC, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

DT.CA CAplus document type: Conference; Dissertation; Journal; Patent
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); CMBI (Combinatorial study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation); PRP (Properties)



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744 REFERENCES IN FILE CAPLUS (1907 TO DATE)
21 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:328499

REFERENCE 2: 141:325581

REFERENCE 3: 141:301134

REFERENCE 4: 141:289311

REFERENCE 5: 141:288544

REFERENCE 6: 141:243713

REFERENCE 7: 141:235718

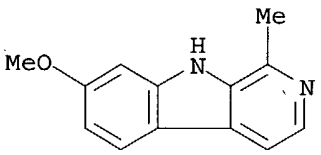
REFERENCE 8: 141:201434

REFERENCE 9: 141:174097

REFERENCE 10: 141:150435

L121 ANSWER 39 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **343-27-1** REGISTRY
CN 9H-Pyrido[3,4-b]indole, 7-methoxy-1-methyl-, monohydrochloride (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 7-Methoxy-1-methyl-9H-pyrido[3,4-b]indole monohydrochloride
CN Harmine hydrochloride
CN Harmine monohydrochloride
MF C13 H12 N2 O . Cl H
CI COM
LC STN Files: BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CHEMCATS, CHEMLIST, CSCHEM, EMBASE, RTECS*, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Conference; Journal; Patent
RL.P Roles from patents: USES (Uses); NORL (No role in record)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
CRN (442-51-3)



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PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

63 REFERENCES IN FILE CA (1907 TO DATE)
63 REFERENCES IN FILE CAPLUS (1907 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:358387

REFERENCE 2: 141:243713

REFERENCE 3: 141:94452

REFERENCE 4: 140:70862

REFERENCE 5: 140:59221

REFERENCE 6: 135:354168

REFERENCE 7: 128:254308

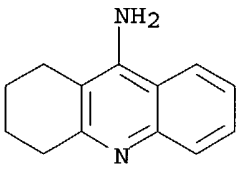
REFERENCE 8: 128:252518

REFERENCE 9: 125:127644

REFERENCE 10: 124:169519

L121 ANSWER 40 OF 40 REGISTRY COPYRIGHT 2004 ACS on STN
RN **321-64-2** REGISTRY
CN 9-Acridinamine, 1,2,3,4-tetrahydro- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Acridine, 9-amino-1,2,3,4-tetrahydro- (7CI, 8CI)
CN Acridine, 9-aminotetrahydro- (6CI)
OTHER NAMES:
CN 1,2,3,4-Tetrahydro-9-acridinamine
CN 1,2,3,4-Tetrahydro-9-aminoacridine
CN 9-Amino-1,2,3,4-tetrahydroacridine
CN Tacrine

CN Tetrahydroaminacrine
CN Tetrahydroaminocrin
CN Tetrahydroaminocrine
CN THA
MF C13 H14 N2
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGU, EMBASE, IMSDRUGNEWS, IMSPATENTS, IMSRESEARCH, IPA, MEDLINE, MRCK*, PHAR, PROMT, PROUSDDR, PS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Conference; Dissertation; Journal; Patent; Report
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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54 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1117 REFERENCES IN FILE CAPLUS (1907 TO DATE)
24 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:342791

REFERENCE 2: 141:337465

REFERENCE 3: 141:325776

REFERENCE 4: 141:325772

REFERENCE 5: 141:325766

REFERENCE 6: 141:314348

REFERENCE 7: 141:289098

REFERENCE 8: 141:288995

REFERENCE 9: 141:271003

REFERENCE 10: 141:270862

=> d his

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                SET COST OFF

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L1                STR
L2              50 S L1
L3           21421 S L1 FUL
                  SAV TEMP L3 ZINNA627/A
L4                STR L1
L5               0 S L4 SAM SUB=L3
L6                STR L4
L7               0 S L6 SAM SUB=L3
L8               3 S L6 FUL SUB=L3
                  SAV L8 ZINNA627A/A
L9               2 S L8 AND NC5/ES
L10           5444 S L3 AND 1839.23.22/RID
L11               STR L1
L12             50 S L11 CSS SAM SUB=L3
L13               STR L11
L14             50 S L13 CSS SAM SUB=L3
L15           6266 S L13 CSS FUL SUB=L3
                  SAV L15 ZINNA627B/A
L16          15155 S L3 NOT L15
L17               STR L13
L18             39 S L17 CSS SAM SUB=L16
L19            603 S L17 CSS FUL SUB=L16
                  SAV L19 ZINNA627C/A
L20               STR L13
L21             36 S L20 CSS SAM SUB=L19
L22            530 S L20 CSS FUL SUB=L19
                  SAV L22 ZINNA627D/A
L23             73 S L19 NOT L22
L24            528 S L22 NOT L9

     FILE 'HCAOLD' ENTERED AT 08:06:12 ON 17 NOV 2004
L25              0 S L9
L26             54 S L24

     FILE 'HCAPLUS' ENTERED AT 08:06:55 ON 17 NOV 2004
L27              1 S L9
                  E AVENTI/PA,CS
L28           2233 S AVENTIS?/PA,CS
                  E RITZELER O/AU
L29             15 S E3,E4
                  E CASTRO A/AU
L30            672 S E3-E28
L31             26 S E65,E66
                  E GRENIER L/AU
L32             49 S E3,E4,E6
                  E SOUCY F/AU
L33             24 S E3,E5,E6
                  E HANCOCK W/AU
L34            208 S E3,E16,E21-E23
                  E MAZDIYASNI H/AU
L35             20 S E3,E4
                  E PALOMBELLA V/AU
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L36          27 S E4-E6
                E ADAMS J/AU
L37        1304 S E3-E62
                E ADAMS JULIAN/AU
L38         186 S E3-E5
L39           1 S L27 AND L28-L38
L40        1106 S L24
L41           5 S L28-L38 AND L40
L42           2 S (US20040110759 OR US20020099068 OR US6627637)/PN OR (US2003-6
L43           5 S L39,L41,L42

     FILE 'REGISTRY' ENTERED AT 08:14:09 ON 17 NOV 2004
L44           1 S 159606-08-3

     FILE 'HCAPLUS' ENTERED AT 08:17:14 ON 17 NOV 2004
L45         624 S L44
L46        1181 S (IKK OR IKK PROTEIN OR I KAPPA B OR I KAPPA B PROTEIN)()KINAS
L47         143 S I KAPPA B PROTEIN (L) KINASE
L48         137 S IKK# KINASE
L49         651 S KINASE (L) IKK# (L) PROTEIN
L50         106 S I KAPPA B ALPHA KINASE
L51           2 S CHUK KINASE
L52          12 S I VKAPPA B KINASE
L53         158 S IKK ALPHA KINASE
L54         212 S IKK BETA KINASE OR CONSERVED HELIX LOOP HELIX UBIQUIT? KINASE
L55        1508 S L45-L54
L56           5 S L43 AND L55
L57           5 S L40 AND L55
L58           5 S L56,L57
L59        1101 S L40 NOT L58
L60        1005 S L59 AND (PD<=20000315 OR PRD<=20000315 OR PRD<=20000315)
L61          73 S L24 (L) (THU OR PAC OR PKT OR DMA)/RL
L62         420 S L24 AND (PHARMACOL? OR PHARMACEUT?)/SC,SX
L63          13 S L24 AND PATHOL?/SC,SX
L64           1 S L24 AND IMMUN?/SC,SX
L65         381 S L60 AND L61-L64
                E ANTI-AIDS/CT
L66       13306 S E4,E5
                E E4+ALL
                E E15+ALL
L67       15458 S E9,E10,E8+NT
                E E24+ALL
L68       44186 S E6,E5+NT
                E E20+ALL
L69        3643 S E25
                E ANTI-ALZHEIMER/CT
L70        5077 S E5,E6
                E E5+ALL
L71       77045 S E7+OLD,NT,PFT,RT OR E8+OLD,NT,PFT,RT OR E9+OLD,NT,PFT,RT
                E E7+ALL
L72      134043 S E10 OR E26+OLD,NT OR E27+OLD,NT,PFT,RT OR E28+OLD,NT,PFT,RT O
L73        3824 S E34-E39
                E ASTHMA/CT
L74       15896 S E3-E5
                E E3+ALL
L75       15896 S E9
                E E12+ALL
L76       12267 S E5,E4+NT
L77         929 S E12
                E E11+ALL
                E E13+ALL
L78         947 S E3,E4
                E ARTHRITIS/CT
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L79        14296 S E3-E24
                 E E3+ALL
L80        27588 S E6+NT
L81        29129 S E5+NT
                 E E22+ALL
L82         6206 S E5,E4
                 E E7+ALL
                 E E5+ALL
L83        31139 S E4,E5,E3+NT
                 E E29+ALL
L84         6317 S E5,E4+NT
                 E E10+ALL
                 E E10+ALL
                 E E23+ALL
L85         1831 S E6,E5+NT
                 E HEART, DISEASE/CT
L86        74999 S E3-E83
                 E E3+ALL
L87        23857 S E8,E9
L88        76163 S E7+NT
L89       212727 S E92+OLD,NT
L90           35 S L60 AND L66-L89
L91           16 S L65 AND L90
L92           19 S L90 NOT L91
L93           35 S L90-L92
                 SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 08:35:46 ON 17 NOV 2004
L94           11 S E1-E11
L95           10 S L94 NOT C13H14N2

     FILE 'HCAPLUS' ENTERED AT 08:37:07 ON 17 NOV 2004
L96          965 S L95
L97           35 S L96 AND L93
L98          365 S L65 NOT L97
                 E TRANSCRIPTION FACTOR/CT
                 E TRANSCRIPTION FACTORS/CT
L99        94738 S E3
L100       95889 S E3+OLD
L101           0 S L98 AND L99,L100
L102          20 S L98 AND P/DT
                 SEL HIT RN

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L103          67 S E1-E67
L104          66 S L103 NOT C21H19N3O4

     FILE 'HCAPLUS' ENTERED AT 08:41:57 ON 17 NOV 2004
L105         965 S L104
L106          20 S L105 AND L102
L107          55 S L97,L106
L108          55 S L107 AND L60
L109          55 S L108 AND L27-L43,L45-L93,L96-L102,L105-L108
L110          34 S L109 AND (COUGH? OR HEART, DISEASE OR ARTERIOSCLEROSIS OR HEA
L111           1 S L109 AND PHOSPHODIESTERASE
L112          35 S L110,L111
L113          20 S L109 NOT L112
L114           5 S L58 AND L27-L43,L45-L93,L96-L102,L105-L113

     FILE 'REGISTRY' ENTERED AT 08:57:37 ON 17 NOV 2004

     FILE 'HCAPLUS' ENTERED AT 08:57:59 ON 17 NOV 2004
                 SEL  HIT RN L114
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     FILE 'REGISTRY' ENTERED AT 08:58:42 ON 17 NOV 2004
L115         138 S E68-E205
L116         135 S L115 NOT L44,L9
                 SAV L116 ZINNA627E/A

     FILE 'HCAPLUS' ENTERED AT 08:59:52 ON 17 NOV 2004
                 SEL HIT RN L113

     FILE 'REGISTRY' ENTERED AT 09:00:37 ON 17 NOV 2004
L117          41 S E206-E246
L118          34 S L117 NOT L115
L119          33 S L118 NOT C21H19N3O4
L120           7 S L117 NOT L118
L121          40 S L119,L120

=> => fil uspatful
FILE 'USPATFULL' ENTERED AT 09:02:58 ON 17 NOV 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 16 Nov 2004 (20041116/PD)
FILE LAST UPDATED: 16 Nov 2004 (20041116/ED)
HIGHEST GRANTED PATENT NUMBER: US6820278
HIGHEST APPLICATION PUBLICATION NUMBER: US2004226068
CA INDEXING IS CURRENT THROUGH 16 Nov 2004 (20041116/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 16 Nov 2004 (20041116/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2004
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2004

>>>  USPAT2 is now available.  USPATFULL contains full text of the     <<<
>>>  original, i.e., the earliest published granted patents or         <<<
>>>  applications.  USPAT2 contains full text of the latest US         <<<
>>>  publications, starting in 2001, for the inventions covered in     <<<
>>>  USPATFULL.  A USPATFULL record contains not only the original     <<<
>>>  published document but also a list of any subsequent              <<<
>>>  publications.  The publication number, patent kind code, and      <<<
>>>  publication date for all the US publications for an invention     <<<
>>>  are displayed in the PI (Patent Information) field of USPATFULL   <<<
>>>  records and may be searched in standard search fields, e.g., /PN, <<<
>>>  /PK, etc.                                                         <<<

>>>  USPATFULL and USPAT2 can be accessed and searched together        <<<
>>>  through the new cluster USPATALL.  Type FILE USPATALL to          <<<
>>>  enter this cluster.                                               <<<
>>>                                                                    <<<
>>>  Use USPATALL when searching terms such as patent assignees,       <<<
>>>  classifications, or claims, that may potentially change from      <<<
>>>  the earliest to the latest publication.                           <<<

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> d his l122

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L122           0 S L9

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